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CENTRE COUNTY ECONOMIC ASSESSMENT AND DISCUSSION GUIDE

This report is designed to provide a profile of, and discussion guide to, several key aspects of Centre County's economy. It provides a profile of Centre County economic data, a summary of the agricultural economy in the County, and a number of considerations to guide the interpretation and implications of the data presented. It is not intended as either a comprehensive analysis nor to provide specific recommendations. Further exploration of this and additional data, local priorities and conditions and a thorough discussion of the implications of these are all required for a comprehensive picture of the county's recent changes and its future priorities and opportunities.

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Executive Summary

Economic Overview

Overall, Centre County's employment growth has outpaced the state's between 2006 and 2015 by 4 percentage points (9% vs 5% respectively), a growth rate 80% more than the state. In addition, over this same time period, Centre County's population growth (American Community Survey) exceeded its employment growth (13.9% vs. 9% respectively). In contrast, population change statewide was much slower, only 2%, while state employment grew by 5%, more than twice the change in population. The major lesson here is that population growth is much more robust in Centre County than statewide.

In terms of *employment*, (see Table 3) **Centre County is clearly dominated by several important industries: government and government related enterprises (42.3%); health care and social assistance (8.4%); retail trade (8.3%); accommodations and food services (5.9%); professional, scientific and technical services (5.4%); manufacturing (3.9%); and construction (3.8%).**

Related to *employment growth*, (Table 3) of the county's seven largest employment sectors (government and government related enterprises; health care and social assistance; accommodations and food services; retail trade; professional, scientific and technical services; manufacturing; and construction), Centre County did better than the state average in terms of government and related enterprises (11% vs -5%); health care and social services (30% vs. 14%); retail (-1% vs. -3%); and manufacturing (-4% vs. -14 %). In the remaining major industries, Centre County trailed the state's growth in employment growth: professional, scientific, and technical services (1% vs. 12%); accommodations and food services (5% vs. 11%) and construction (-11% vs.-8%).

From the perspective of *earnings growth* in these seven largest sectors (Table 10), **five industries (government and government related enterprises; health care and social assistance; accommodations and food services; retail trade; and construction) had growth rates that exceeded (or declined less) than the state**, while professional, scientific and technical services; and manufacturing both had growth rates lower than those for the state.

Five additional industry sectors in the county had earnings that outpaced those of the state. Mining grew by 183% compared to the state's 27%. Arts, entertainment, and recreation earnings increased by 52%, outpacing Pennsylvania's 41% increase in this sector. State and local government sector earnings grew by 21% compared to a 3% increase in this sector's earnings in Pennsylvania.

Related to employee commuting, 81% of people working in Centre County were residents of the county, while an additional 6% lived in Clearfield County. The vast majority of Centre County residents who are employed, 90%, work somewhere in Centre County, while 2% work in Clearfield County and 2% work in Clinton County.

Agricultural Overview

Centre County's total agricultural sales in 2012 were \$91,581,000. This represents a 19% increase from 2007 (in inflation adjusted dollars) and a 14% increase in the average sales per farm. Crops (defined broadly) comprised 34% of this total while livestock sales made up 66% of all sales in 2012.

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Dairy products generated roughly 47% of Centre County's agricultural product sales in 2012, followed by oilseed and grain farming (23.9%), cattle and calves (12.3%), and other crop farming (3.6%). Together these three categories account for approximately 40% of all farm sales in the county

In 2012, the county's 1,192 farms made up 162,041 acres. Overall farm numbers increased by 4% between 2007 and 2012, while land in farms increased by 5%. Taken together, the average size of all farms grew by 5%. In 2015 agriculture accounted for 7% of the assessed land value in the county.

Farm sales are dominated by those farms with \$100,000 or more in annual sales. Approximately 87% percent of these sales were generated by 243 farms that had sales of \$100,000 or more – roughly 20% of all farms. Conversely, 52% of all farms in the county had annual sales of less than \$10,000.

Shift-Share Overview

Centre County's employment growth over 2009-2015 of **5.96%** trailed the **9.92%** growth of employment nationally by **-3.96%**. Accounting for this difference was an industry mix inclined toward industries that experienced slower growth, coupled with the fact that a large share of local industries underperformed their counterparts nationally. A number of Centre County industries experienced growth larger than the national employment growth rate of 9.92%, including forestry and fishing; real estate, rental and leasing; administrative and waste services, educational services; and health care and social assistance.

Other county industries under-performed national employment changes. These include mining; utilities; construction; manufacturing, wholesale trade; retail trade; transportation and warehousing; information; finance and insurance; professional, scientific and technical services; management of companies and enterprises; arts, entertainment and recreation, accommodations and food services; other services; federal civilian; and military.

When national and industry specific influences are considered, a number of local industries stand out as doing better than expected – indicative of some local comparative advantage. These industries include farm employment; forestry and fishing; real estate, rentals and leasing; administrative and waste services; health care and social assistance; military; and other suppressed industries. For example, employment in real estate, rental and leasing increased by 379 more jobs than would be expected by national and industry trends, suggesting that this sector is more competitive relative to the real estate sector in other counties. In each of these cases the critical question to ask is: *'What is occurring in Centre County that would account for either more or less growth than would have been expected?'*

Location Quotient Overview

From the perspective of the Location Quotient data, agriculture, forestry, fishing and hunting; mining, quarrying, and oil and gas extraction; utilities; wholesale trade; management of companies and enterprises; administrative and waste services; educational services; transportation and warehousing; and finance and insurance have LQs of .76 or less, indicating that Centre County is likely importing these goods or services from outside the county (or going outside county to purchase these goods and services)

Exporting industries – those likely exporting goods and services to neighboring counties, the state or nation include: construction; retail trade; professional and technical services; health care and social assistance; information; real estate and rental and leasing; accommodation and food services; other services, except public administration.

Economic Development Considerations

There are a number of important trends and changes occurring in Centre County's economy and demographics that warrant both careful consideration and additional investigation. Region-based economic development opportunities and strategic investment; changing demographic characteristics and related services and opportunities; housing concerns and limitations; water quality and quantity and other natural resources and land-use issues; agricultural economic strategies and linkages between production, processing and distribution; infrastructure (including high-speed internet access); and regional tourism development are all important areas worthy of additional attention and consideration.

INTRODUCTION

This report is designed to provide a profile of, and discussion guide to, several key aspects of Centre County's economy. It provides a profile of Centre County economic data, a summary of the agricultural economy in the County, and a number of considerations to guide the interpretation and implications of the data presented. It is not intended as either a comprehensive analysis nor to provide specific recommendations. Further exploration of this and additional data, local priorities and conditions and a thorough discussion of the implications of these are all required for a comprehensive picture of the county's recent changes and its future priorities and opportunities.

In general, this report discusses the major highlights of the publicly available data related to Centre County's economy. Additional links and source information are provided as appropriate.

Discussion questions at the end of each major section and at the conclusion of this report are provided to serve as a springboard for the local discussions. These discussions will be critical to both interpret the implications of the data presented in this report and begin to develop strategies and priorities to address the issues most important for Centre County's long-term future.

Lastly, we have provided additional information in the appendices. These include 1) a discussion of future employment trends in occupations and industry sectors; 2) occupational detailed data; and 3) a brief discussion on living wage levels in Centre County.

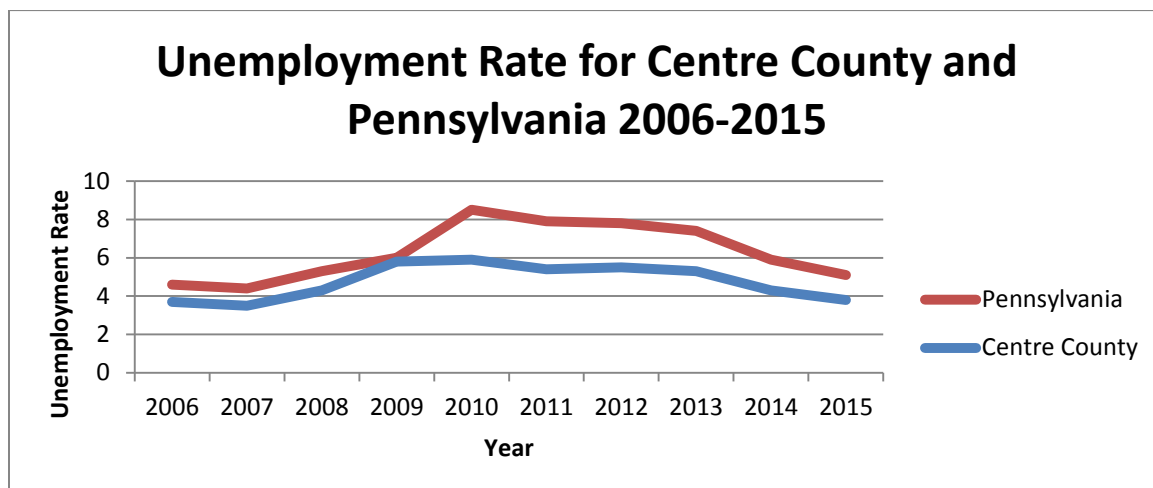
ECONOMIC OVERVIEW

This section begins with a look at employment, commuting patterns, employment characteristics and change at both the general and industry-specific levels. We also include several additional data sets – namely income, population, and finally wages and salaries in both real and inflation-adjusted dollars. The data provided here is intended as a summary of major indicators in the economy. There is a wide range of additional and more detailed information available. As indicated above, a comprehensive assessment of both 'on the ground' and additional secondary data will be required in order to develop a complete assessment and effective economic development strategy.

Unemployment

Centre County's unemployment rate has been below Pennsylvania's every year from 2006 to 2015. (Figure 1).

Figure 1. Annual Unemployment Rate for Centre County and Pennsylvania 2006 – 2015



Source: Bureau of Labor Statistics Local Area Unemployment Statistic, State College MSA = Centre County

Employment

Centre County's economy employed 115,484 full and part-time individuals in 2015, a 9% increase over 2006 (Table 1). Wage and salary employees (includes employees in both the public and private sectors) constituted 96,282 employees, while proprietors accounted for 19,202 jobs. Wage and salary employment grew by 7% between 2006 and 2015, while the number of proprietors increased by 18%. Proprietors are an important consideration because it's an indication of new business growth and potential.

Table 1. Total Full-time and Part-time Employment for Centre County, Wage and Salary Employment, Proprietors Employment 2006 and 2015.

Total Full-time and Part-time Employment for Centre County, Wage and Salary Employment, Proprietors Employment 2006 and 2015					
	2006	2015	Change	% Change Centre County	% Change PA
Total employment (number of jobs)	106,181	115,484	9,303	9%	5%
By Type					
Wage and Salary Employment	89,937	96,282	6,345	7%	2%
Proprietors Employment (2)	16,244	19,202	2,958	18%	29%
Farm Proprietors Employment	969	1,098	129	13%	-2%
Nonfarm Proprietors Employment	15,275	18,104	2,829	19%	31%

(1) Source Bureau of Economic Analysis CA25 Local Area Data

(2) Excludes limited partners.

Table 2 (below) details the number and percent of jobs by industry in Centre County. Private nonfarm employment made up 56.5% of all jobs in 2015, while government and government enterprises (which includes

Penn State University) comprised 42.3%, and farm employment made up 1.2% of the county's overall employment.

In the private sector, health care and social assistance led the way in overall employment at 9,720 jobs (8.4%). This was followed by retail trade (9,557 jobs – 8.3%); accommodation and food services (6,830 jobs – 5.9%); professional, scientific, and technical services (6,252 jobs – 5.4%); manufacturing (4,534 – 3.9%); construction (4,430 – 3.8%; and real estate and rental and leasing (2,695 – 3.5%). Together these industries comprised approximately 39% of total, private non-farm employment in the county in 2015.

Table 2. Employment & Percent Employment by Industry, Centre County, 2015.

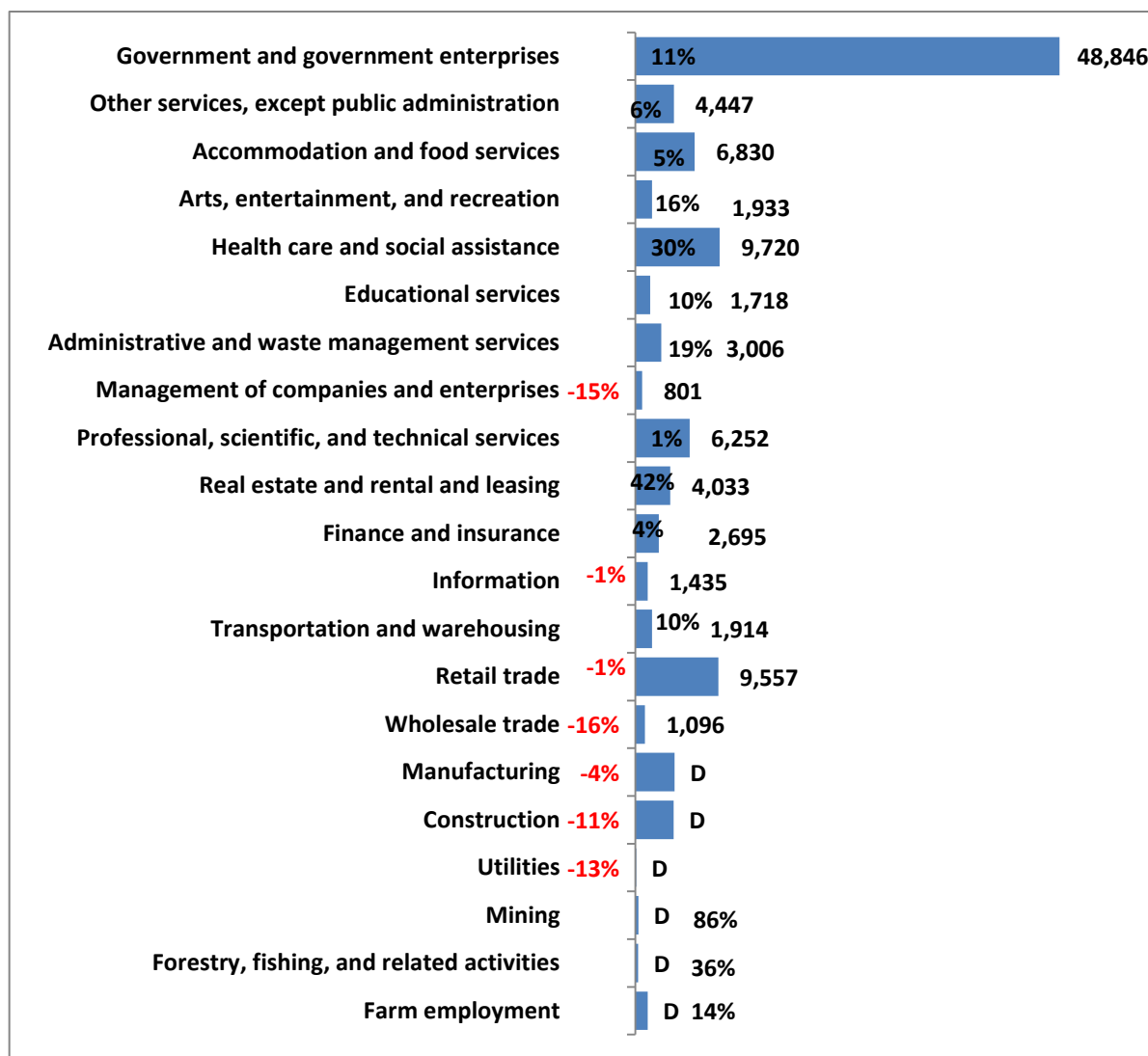
Employment and percent employment by industry Centre County 2015		
	2015	% of Total
Total Employment	115,484	
Farm employment	1,436	1.2%
Nonfarm employment	114,048	98.8%
Private nonfarm employment	65,202	56.5%
Forestry, fishing, and related activities	333	0.3%
Mining, quarrying, and oil and gas extraction	359	0.3%
Utilities	109	0.1%
Construction	4,430	3.8%
Manufacturing	4,534	3.9%
Wholesale trade	1,096	0.9%
Retail trade	9,557	8.3%
Transportation and warehousing	1,914	1.7%
Information	1,435	1.2%
Finance and insurance	2,695	2.3%
Real estate and rental and leasing	4,033	3.5%
Professional, scientific, and technical services	6,252	5.4%
Management of companies and enterprises	801	0.7%
Administrative and support and waste management and remediation services	3,006	2.6%
Educational services	1,718	1.5%
Health care and social assistance	9,720	8.4%
Arts, entertainment, and recreation	1,933	1.7%
Accommodation and food services	6,830	5.9%
Other services (except public administration)	4,447	3.9%
Government and government enterprises	48,846	42.3%
Federal, civilian	459	0.4%
Military	450	0.4%
State and local	47,937	41.5%
State government	43,640	37.8%
Local government	4,297	3.7%

Source Bureau of Economic Analysis CA25 Local Area Data2/ Excludes limited partners.

Employment Change 2006-2015

Looking at total employment in Table 2, however, tells us only part of the story. Equally important is an understanding of how the economy's structure may be changing over time. Figure 2 depicts the number of full and part-time employees in 2015 for the major industries in Centre County, and the percent change in the number of full and part-time employees from 2006-2015 for each sector.

Figure 2. 2015 Centre County Full and Part-Time Employment and Percent Change, 2006-2015.



Source: Bureau of Economic Analysis CA25 Local Area Data
D= Not Disclosed

Additionally, comparing local and state changes can also illuminate how Centre County is changing relative to activity going on in the overall economy. Table 3 details employment and change in jobs in Centre County's economy from 2006 to 2015. The total number of jobs in the county increased by 9,303 (9%), which is higher than the 5% employment increase across the state. Industries in Centre County that experienced more growth (or smaller declines) than the state include farm employment (14% vs. 5%); forestry, fishing and related activities (36% vs. 5%); manufacturing (-4% vs. -14%); real estate rental and leasing (42% vs. 25%); administrative and waste services (19% vs. 13%); retail trade (-1% vs. -3%); information (-1% vs. -17%); health care and social assistance (30% vs. 14%); other services, except public administration (6% vs. 4%); and government and government enterprises (11% vs. -5%).

Those that had less growth than the state include mining (86% vs. 91%); utilities (-13% vs. 19%); construction (-11% vs. -8%); wholesale trade (-16% vs. -2%); accommodations and food services (5% vs. 11%); transportation and warehousing (10% vs. 14%); finance and insurance (4% vs. 12%); professional, scientific and technical services (1% vs. 12%); management of companies and enterprises (-15% vs. 37%); educational services (10% vs. 16%); and arts, entertainment and recreation (16% vs. 20%). For a more detailed discussion of these changes, see page 30 for the discussion of Centre County's Shift Share Analysis.

As detailed in Table 3 and Figure 2, in 2015 government and government enterprises (which includes Penn State University) was the largest employment sector in Centre County with 48,846 employees. In the private sector, health care and social assistance was the largest employer with 9,720 jobs in the county in 2015 – and experienced an increase of 2,222 (30%) jobs from 2006. This was followed by retail trade with 9,557 people in 2015, a 1% decrease from 2006. Accommodations and food services was the third largest private sector industry employer, employing 6,830 people in 2015 – a 5% increase since 2006. It should be noted, however, that Centre County's job growth in this sector trailed Pennsylvania's 11% growth rate. Professional, scientific, and technical services was the fourth largest private sector employer in Centre County employing 6,252 people in 2015 a 1% increase from 2006. This sector's growth rate was significantly smaller than the 12% increase across Pennsylvania. Manufacturing was the fifth largest private sector employer in 2015 (4,534), decreasing by 4% from 2006. This sector decreased by 14% statewide during the time period. The sixth largest private sector employer was other services (except public administration) (4,447), which represented a 6% increase from 2006, exceeding Pennsylvania's 4% growth in this sector.

Table 3. Centre County Total Full-Time & Part-Time Employment (Number of Jobs) by Industry (2006-2015)

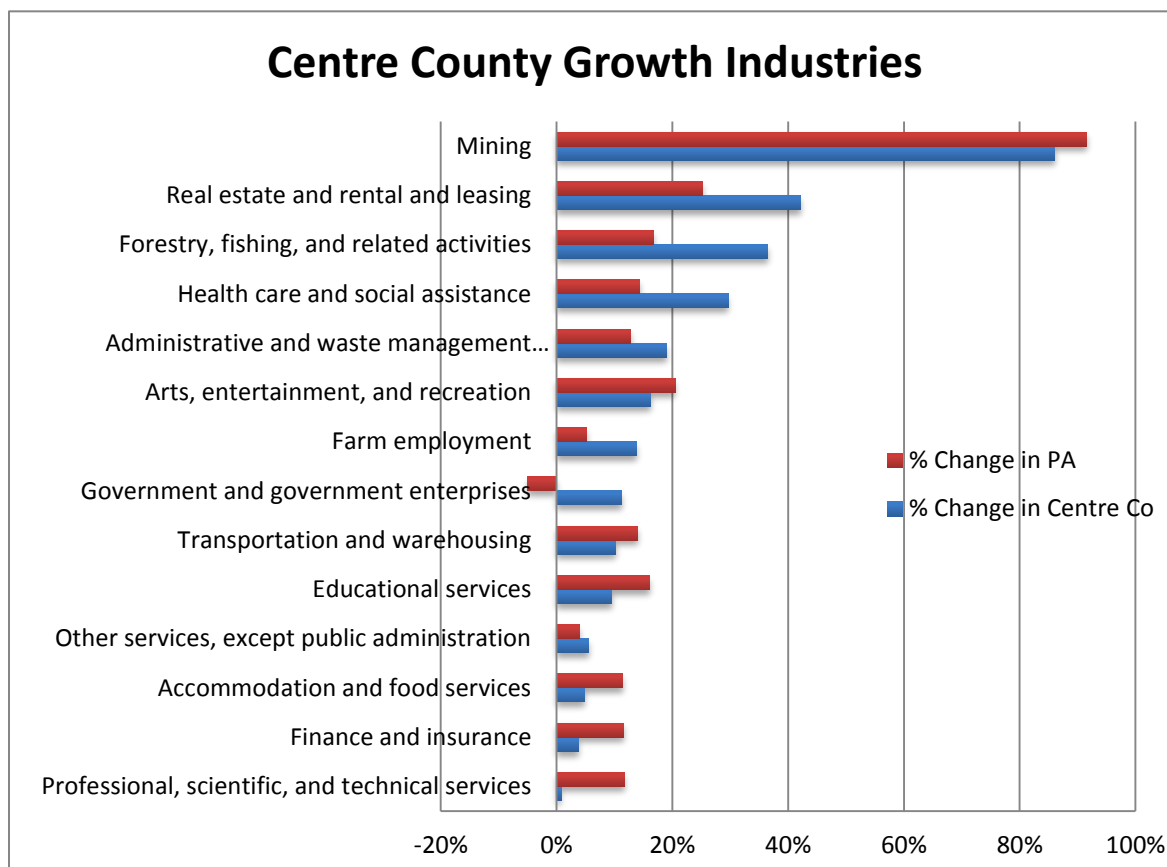
	2006	2015	Change from 2006 to 2015	% Change	% Employed	% Change PA
Total Employment	106,181	115,484	9,303	9%		5%
Farm employment	1,262	1,436	174	14%	1%	5%
Nonfarm employment	104,919	114,048	9,129	9%	99%	5%
Private nonfarm employment	60,997	65,202	4,205	7%	56%	6%
Forestry, fishing, and related activities	244	333	89	36%	0%	17%
Mining	193	359	166	86%	0%	91%
Utilities	125	109	(16)	-13%	0%	19%
Construction	4,992	4,430	(562)	-11%	4%	-8%
Manufacturing	4,731	4,534	(197)	-4%	4%	-14%
Wholesale trade	1,310	1,096	(214)	-16%	1%	-2%
Retail trade	9,652	9,557	(95)	-1%	8%	-3%
Transportation and warehousing	1,736	1,914	178	10%	2%	14%
Information	1,452	1,435	(17)	-1%	1%	-17%
Finance and insurance	2,598	2,695	97	4%	2%	12%
Real estate and rental and leasing	2,837	4,033	1,196	42%	3%	25%
Professional, scientific, and technical services	6,204	6,252	48	1%	5%	12%
Management of companies and enterprises	939	801	(138)	-15%	1%	37%
Administrative and waste management services	2,525	3,006	481	19%	3%	13%
Educational services	1,568	1,718	150	10%	1%	16%
Health care and social assistance	7,498	9,720	2,222	30%	8%	14%
Arts, entertainment, and recreation	1,664	1,933	269	16%	2%	20%
Accommodation and food services	6,515	6,830	315	5%	6%	11%
Other services, except public administration	4,214	4,447	233	6%	4%	4%
Government and government enterprises	43,922	48,846	4,924	11%	42%	-5%
Federal, civilian	450	459	9	2%	0%	-8%
Military	476	450	(26)	-5%	0%	-13%
State and local	42,996	47,937	4,941	11%	42%	-4%
State government	(D)	43,640	(D)	(D)	38%	1%
Local government	(D)	4,297	(D)	(D)	4%	-6%

Source BEA CA25 Local Area Data, 2/ Excludes limited partners. Not shown to avoid disclosure of confidential information, but the estimates for this item are included in the totals. Last updated: November 17, 2016 -- new estimates for 2015; revised estimates for 2001-2014 D) Not shown to avoid disclosure of confidential information, but the estimates for this item are included in the totals. Last updated: November 17, 2016 -- new estimates for 2015; revised estimates for 2001-2014

Employment Change for Centre County Growth Industries (2006-2015)

Figure 3 below compares the percent employment gain for Centre County and Pennsylvania for industries with employment growth in Centre County.

Figure 3. Percent Change in Employment (2006-2015) for Centre County Employment Growth Industries, Centre County and Pennsylvania.

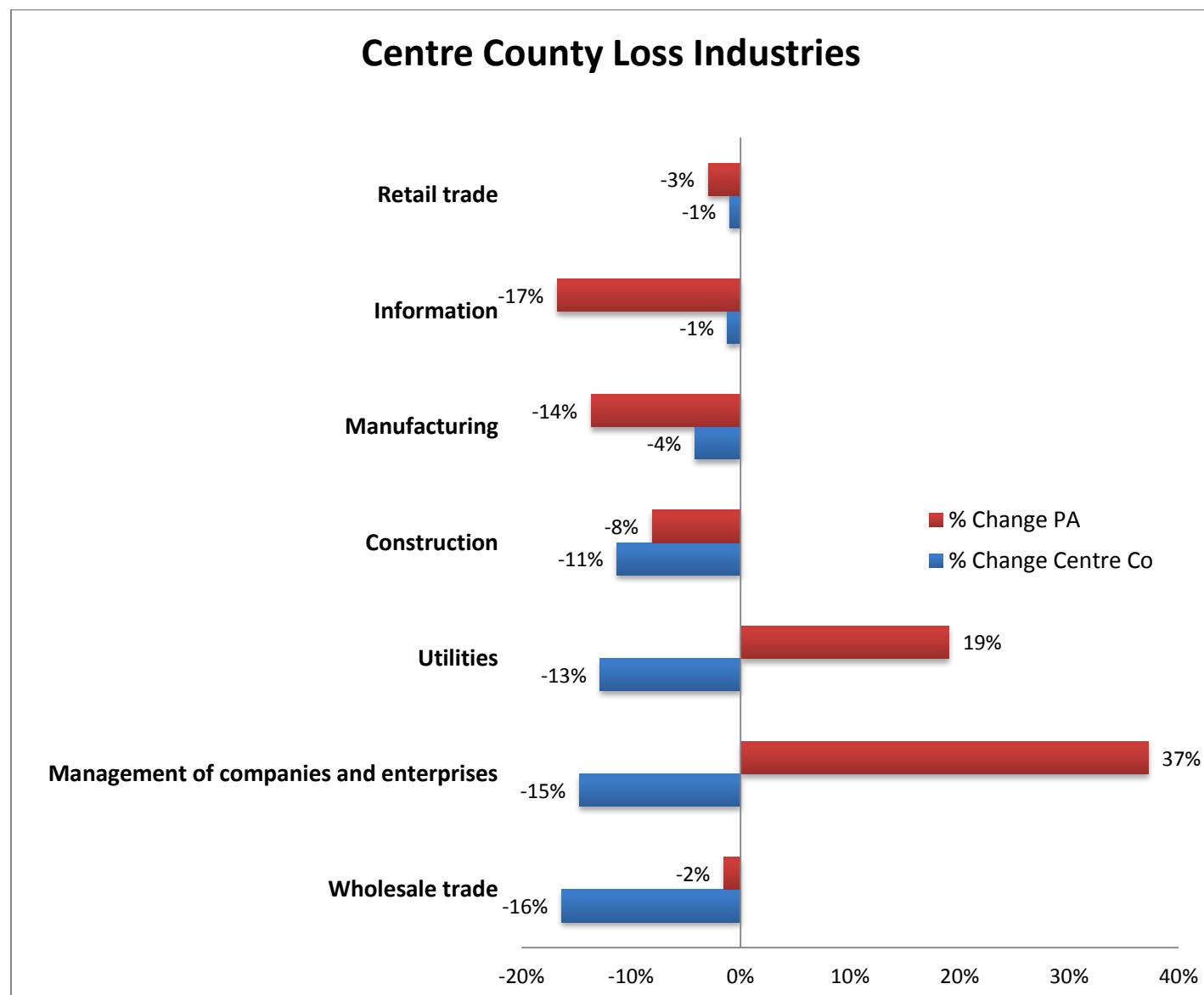


Source: Bureau of Economic Analysis CA25 Local Area Data

Employment Change for Centre County Employment Loss Industries (2006-2015)

Figure 4 below compares the percent employment loss for Centre County and Pennsylvania industries for the seven industries that lost employment in Centre County.

Figure 4. Percent Change in Employment (2006-2015) for Employment Loss Industries, Centre County and Pennsylvania.



Source: Bureau of Economic Analysis CA25 Local Area Data

Occupations in Centre County

The occupations of people employed in Centre County tend to be more professional than employment stateside. About 10% of people employed in the county during 2016 worked in education-related occupations, compared to only 5.9% statewide (see Table 4), while 17.8% work in office and administrative support occupations, compared to 16.4% statewide. In contrast, only 4.1% of people are employed in Centre County are employed in production occupations, less than two thirds of the 6.9% so employed statewide. This occupational data reflects the specific tasks done by the worker, irrespective of the sector in which they are employed (in other words, managers working with the retail and manufacturing sectors are counted as 'managers' in this data). A more detailed breakdown of occupations within each category appears in Appendix C.

Not unexpectedly, wages and salaries vary across the occupations. Those working in management occupations report an average annual salary of \$109,620 (\$52.70 an hour), with managers at the 25th quartile making \$31.92 an hour, and managers at the 75th quartile making \$62.48. Several occupations reported average annual wages or salaries higher than \$60,000 a year, including business and financial operations occupations; computer and mathematical occupations; architecture and engineering occupations; life, physical and social science occupations; legal occupations; education-related occupations; and healthcare practitioners and technical occupations.

Table 4. Distribution of Occupations within Centre County, and Wages/Salaries, 2016

Occupation	Employment			Wages/Salaries			
	Total Employed	% of Employed	PA % of Employed	Hourly mean	Annual mean	Hourly 25% quartile	Hourly 75% quartile
All Occupations	68,380	100.0%	100.0%	\$21.96	\$45,670	\$11.36	\$27.33
Management Occupations	2,870	4.2%	3.9%	\$52.70	\$109,620	\$31.92	\$62.48
Business and Financial Operations Occupations	2,890	4.2%	4.8%	\$30.72	\$63,890	\$21.55	\$36.74
Computer and Mathematical Occupations	2,580	3.8%	2.7%	\$36.20	\$75,300	\$26.99	\$43.00
Architecture and Engineering Occupations	1,620	2.4%	1.7%	\$36.15	\$75,190	\$21.88	\$46.35
Life, Physical, and Social Science Occupations	570	0.8%	0.8%	\$31.45	\$65,420	\$20.81	\$39.33
Community and Social Service Occupations	1,080	1.6%	1.9%	\$22.10	\$45,970	\$15.54	\$27.89
Legal Occupations	270	0.4%	0.7%	\$33.61	\$69,910	\$18.65	\$37.56
Education, Training, and Library Occupations	6,860	10.0%	5.9%	\$29.24	\$60,810	\$17.35	\$38.81
Arts, Design, Entertainment, Sports, and Media Occupations	720	1.1%	1.0%	\$21.43	\$44,580	\$11.65	\$27.03
Healthcare Practitioners and Technical Occupations	3,810	5.6%	6.7%	\$32.63	\$67,870	\$18.97	\$34.89
Healthcare Support Occupations	1,310	1.9%	3.3%	\$13.79	\$28,670	\$11.03	\$15.54
Protective Service Occupations	1,470	2.1%	2.2%	\$23.95	\$49,820	\$17.07	\$32.27
Food Preparation and Serving Related Occupations	6,900	10.1%	8.7%	\$11.23	\$23,360	\$8.59	\$12.50
Building and Grounds Cleaning and Maintenance Occupations	2,230	3.3%	3.0%	\$13.19	\$27,430	\$9.42	\$16.30
Personal Care and Service Occupations	2,150	3.1%	3.9%	\$11.75	\$24,450	\$9.34	\$12.37
Sales and Related Occupations	6,440	9.4%	9.8%	\$16.87	\$35,100	\$8.87	\$19.00
Office and Administrative Support Occupations	12,200	17.8%	16.4%	\$16.20	\$33,690	\$10.99	\$19.10
Farming, Fishing, and Forestry Occupations	180	0.3%	0.1%	\$16.86	\$35,070	\$10.96	\$21.78
Construction and Extraction Occupations	2,880	4.2%	3.8%	\$20.91	\$43,500	\$15.26	\$24.66
Installation, Maintenance, and Repair Occupations	3,220	4.7%	4.0%	\$19.30	\$40,140	\$14.32	\$22.86
Production Occupations	2,800	4.1%	6.9%	\$16.98	\$35,320	\$12.53	\$19.64
Transportation and Material Moving Occupations	3,330	4.9%	7.7%	\$15.82	\$32,900	\$10.58	\$19.25

Source: Bureau of Labor Statistics (BLS) Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates, 2016

Employee Commuting to Centre County

Centre County industries employ workers that live both in and outside of the county. Table 5 and Figure 5 provide a look at the residence of employees working for Centre County businesses (annual average 2009 and 2013).

Eighty-one percent (81%/64,045) of individuals employed in Centre County live in Centre County. Eleven percent (11%) of the employees in the county travel from three surrounding counties; Clearfield County (6%), Huntingdon County (3%) and Mifflin County (2%).

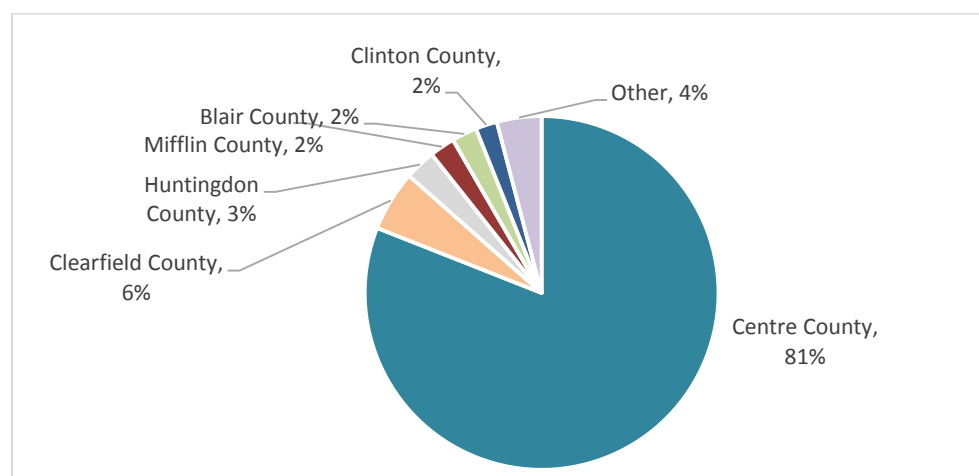
Seventy-four percent of individuals employed in Clearfield County live in Clearfield County. In Blair County, 79% of the individuals employed in this county also live there. Seventy-five percent (75%) of Clinton County individuals that are employed live in Clinton County. Seventy-seven percent (77%) of individuals employed in Huntingdon County live in Huntingdon County. In comparison, these percentages are smaller than that of Centre County. Mifflin County has a slightly larger margin, with eighty-three percent of individuals employed in this county also living there.

Table 5. Residence of Employees Working in Centre County: Annual Average 2009-2013

County of Residence	Workers Employed in Centre County	% of Workers, by County of Residence
Centre County	64,045	81%
Clearfield County	4,373	6%
Huntingdon County	2,223	3%
Mifflin County	1,829	2%
Blair County	1,827	2%
Clinton County	1,559	2%
Other	3,224	4%

Source: American Community Survey *estimated

Figure 5. Residence of Employees Working in Centre County: Annual Average 2009-2013



Source: American Community Survey *estimated

Employment Location of Centre County Residents

About 90 percent of employed Centre County residents work in the county, while the remaining 10 percent commute to other counties for work (see Table 6 and Figure 6). Employers in the counties surrounding Centre County employed approximately 10% of Centre County workers.

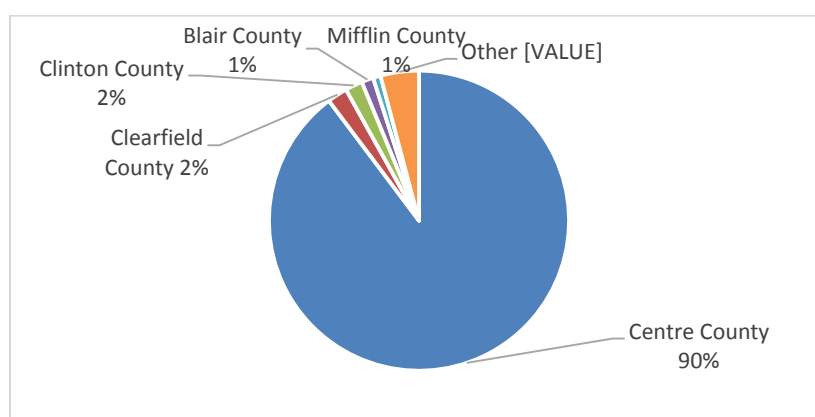
When considering how Centre County compares to other counties, 72% of employed Clearfield County residents work in the county, and the remaining twenty-eight percent commute to other counties for work. Seventy-three percent of employed Mifflin County residents work in the county, and sixty-five percent of employed Clinton County residents work in the county. Sixty-three percent of employed Huntingdon County residents work in Huntingdon County. These percentages are all much lower than that of Centre, with the exception of Blair County, which has eighty-seven percent of employed residents working in the county

Table 6. Employment Location of Centre County Residents: Annual Average 2009-2013

Where Centre County Residents Work		
County Where Employed	Centre County Residents Employed in that County	% Employed Centre County Residents
Centre County	64,045	90%
Clearfield County	1,550	2%
Clinton County	1,327	2%
Blair County	910	1%
Mifflin County	582	1%
Other	2,949	4%

Source: American Community Survey*estimated

Figure 6. Employment Location of Centre County Residents, 2009-2013



Source: American Community Survey *estimated

Personal and Per Capita Income

Table 7 and Figure 7 detail Centre County's total personal income and per capita income for 2006 and 2015. Total personal income of Centre County residents in 2015 was \$6,639,001,000. This represents a 21% increase in real dollars since 2006. Over this same period Centre County's population grew by 13.9% compared with 2% at the state level.

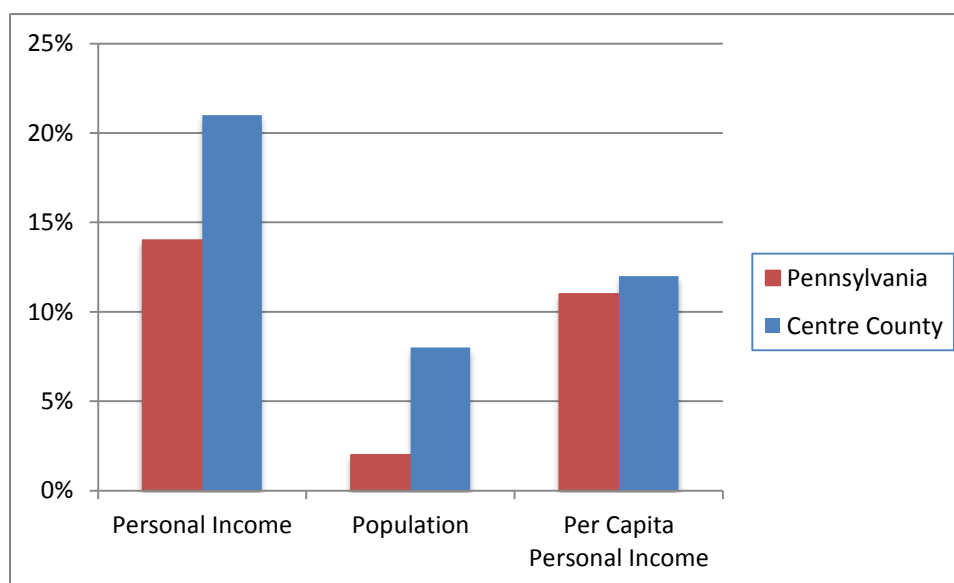
Note: This overview does not consider a wide range of other relevant demographic and workforce characteristics that may be important to the long-term outlook for employment and job growth. For an accessible and comprehensive profile of Centre County, please see the Center for Rural Pennsylvania's [County Profiles](#). These profiles include an array of useful income, population, housing, health, farm and other data that you may want to consider.

Table 7. Personal Income and Per Capita Personal Income, Centre County, 2006-2015

	2006 Nominal	2006 Inflation Adjusted	2015	% Change Real County	% Change PA Real
Personal Income (thousands of dollars)	\$4,669,296	\$5,489,598	\$6,639,001	21%	14%
Per Capita Personal income	\$31,394	\$36,909	\$41,344	12%	11%

**% Change inflation adjusted - \$1,000 in 2006 = \$1,175.68 in 2015 dollars Source: BEA CA05 Local Area Data, Census Bureau midyear population estimates. Estimates for 2001-2012 reflect county population estimates available as of March 2013*

Figure 7. Change in Personal Income, Population and Per Capita Income (2006-2015), Centre County and Pennsylvania.

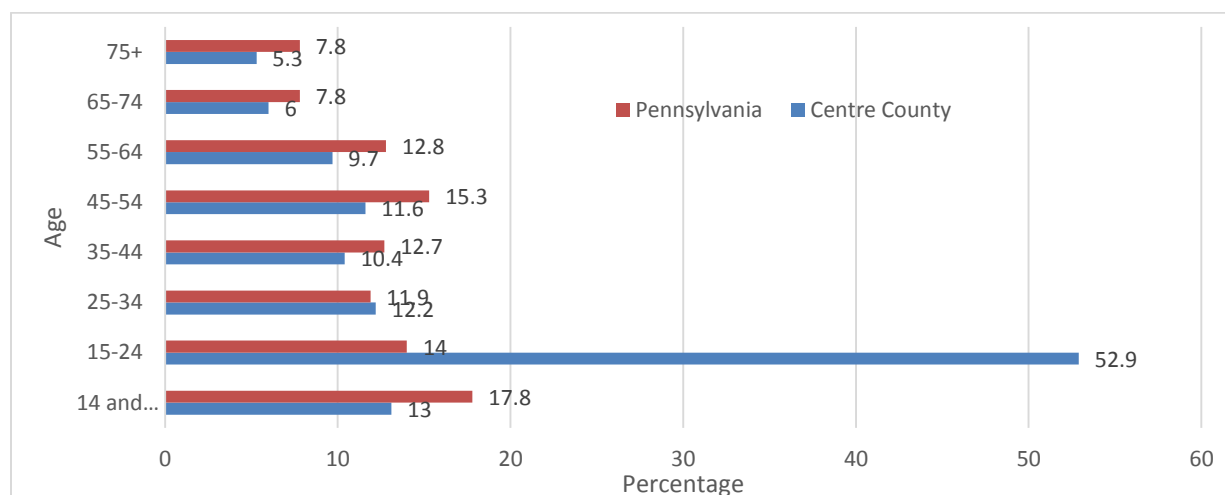


Source: Bureau of Economic Analysis, (BEA) CA05 Local Area Data

Population - Age Structure

As Figure 8 details, not surprisingly, Centre County population is younger than the state's as a whole. Centre County has a higher percentage of 15-24 than the state by a considerable margin (14% vs. 53%) and only slightly higher percentage of 25-34 year olds (12.2% vs. 11.9%). Median age for Centre County was 30.3 compared to 40.5 for the state. Most age cohorts were smaller (in percentage terms) than the state's.

Figure 8. Total Population by Age in Centre County Compared to Pennsylvania



Source: Center for Rural Pennsylvania, County Profiles

Table 8 details the sources and changes in earnings in Centre County income for 2006 and 2015. Earnings include wages and salaries, as well as employer contributions to pensions, health insurance, and Social Security. Wages and salaries increased (in inflation adjusted dollars) by 19% in Centre County from 2006 to 2015, compared to a 9% increase in Pennsylvania. Proprietors' income in Centre County grew by 20%, compared to a 23% growth rate in Pennsylvania. Farm proprietors' income decreased by 105% from 2006. Nonfarm proprietors' income in the county increased by 23%, equaling that of the state. Wages and salaries comprise 68% of 2015 earned income in the county. Proprietors' income made up approximately 11% of total earned income in the county.

Table 8. Earnings, Centre County, 2006-2015 (\$1,000)

	2006	2006 Inflation Adjusted	2015	Percent Contribution	% Change Centre *	% Change PA *
Earnings	\$4,200,434	\$4,938,366	\$5,882,523		19%	9%
Wages and salaries	\$2,580,612	\$3,033,974	\$3,622,449		19%	9%
Employer contributions to pensions, insurance, & Social Security	\$1,223,474	\$1,438,414	\$1,699,657		18%	6%
Proprietors' income (1)	\$396,348	\$465,978	\$560,417		20%	23%
Farm proprietors' income	\$7,606	\$8,942	\$(464)	0.14%	-105%	38%
Nonfarm proprietors' income	\$388,742	\$457,036	\$560,881	99.86*	23%	23%

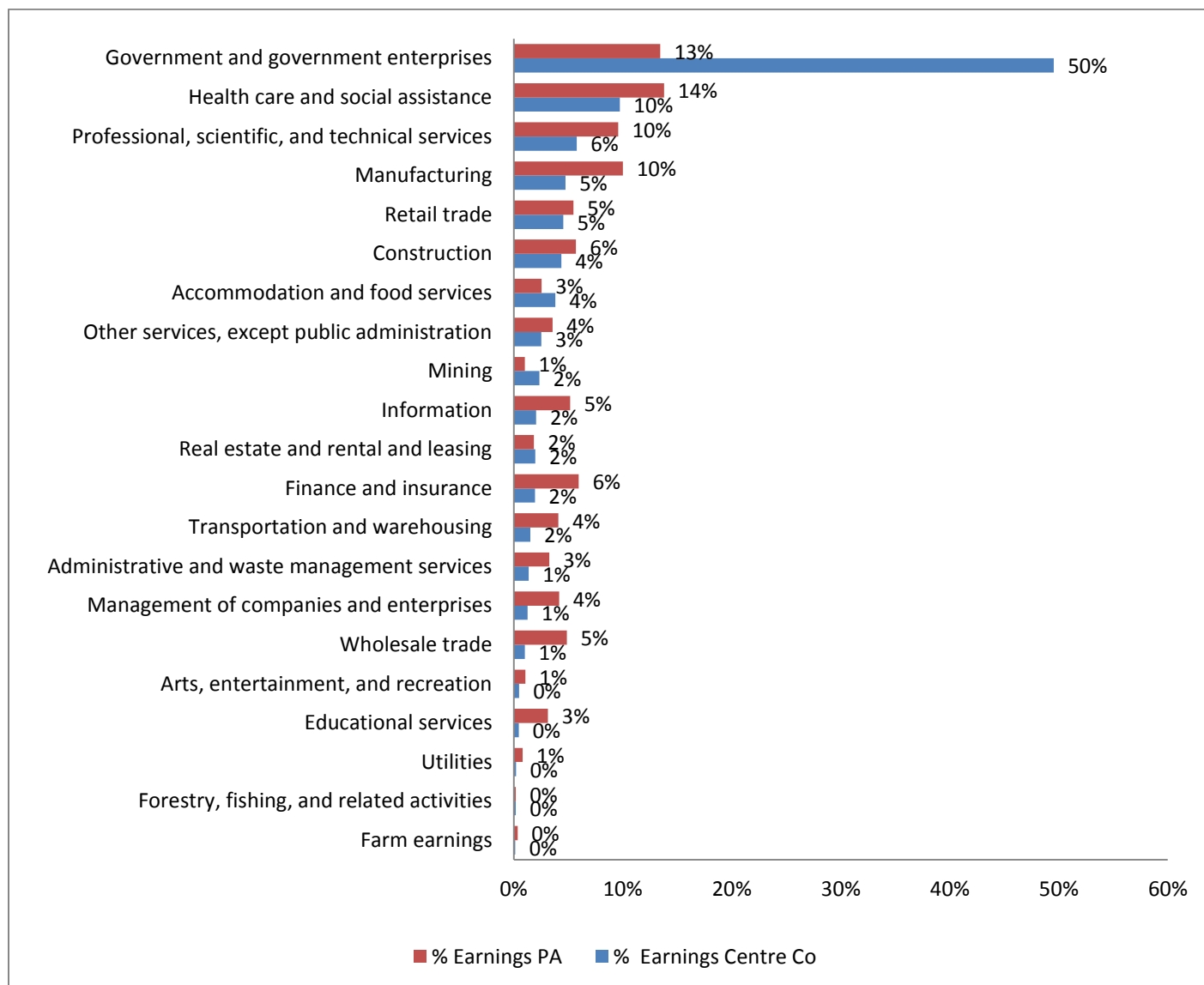
*% Change inflation adjusted - \$1,000 in 2006 = \$1,175.68 in 2015 dollars. Source: BEA CA05 Local Area Data , (1)
Proprietors' income includes the inventory valuation adjustment and capital consumption adjustment

Earning by Sector

In terms of 2015 earnings, as indicated in Table 9, nonfarm earnings contributed 99.86% of earnings in Centre County, while farm earnings contributed 0.14%. Private nonfarm earnings contributed 50.31% of earnings in the county's.

Figure 9 and Table 9 depict the percent total earnings in 2015 by industry for Centre County and Pennsylvania. Private non-farm enterprises (50.3%) contributed the largest percentage of earnings in Centre County, followed closely by government and government (49.55%). Of the private non-farm enterprises, the top six contributors to earnings in the county were healthcare and social assistance (10%), followed by Professional, scientific and technical services (6%) manufacturing (5%); retail trade (5%); construction (4%); and accommodation and food services (4%).

Figure 9. Percent Total Earnings by Sector, 2015, Centre County and Pennsylvania.



Source: Bureau of Economic Analysis CA5N Personal Income by Major Component and Earnings by NAICS Industry

Table 9. Earnings by Sector, Centre County, 2015 (\$1,000)

Sector	Centre County Earnings by Sector	Centre County Earnings as % of Total	PA Earnings as % of Total
Total Earnings	\$5,882,523	100%	100%
Farm earnings	\$8,528	0.14%	0.35%
Nonfarm earnings	\$5,873,995	99.86%	99.65%
Private nonfarm earnings	\$2,959,472	50.31%	86.22%
Forestry, fishing, and related activities	\$10,958	0.19%	0.20%
Mining	\$138,512	2.35%	1.02%
Utilities	\$12,656	0.22%	0.81%
Construction	\$256,259	4.36%	5.71%
Manufacturing	\$279,280	4.75%	10.00%
Durable goods manufacturing	\$233,001	3.96%	6.02%
Nondurable goods manufacturing	\$14,323	0.24%	0.13%
Wholesale trade	\$59,239	1.01%	4.87%
Retail trade	\$267,413	4.55%	5.47%
Transportation and warehousing	\$89,333	1.52%	4.10%
Information	\$120,638	2.05%	5.16%
Finance and insurance	\$113,835	1.94%	5.96%
Real estate and rental and leasing	\$116,218	1.98%	1.84%
Professional, scientific, and technical services	\$339,637	5.77%	9.58%
Management of companies and enterprises	\$74,961	1.27%	4.15%
Administrative and waste management services	\$80,061	1.36%	3.27%
Educational services	\$26,895	0.46%	3.14%
Health care and social assistance	\$572,125	9.73%	13.79%
Arts, entertainment, and recreation	\$29,076	0.49%	1.06%
Accommodation and food services	\$223,920	3.81%	2.55%
Other services, except public administration	\$148,456	2.52%	3.55%
Government and government enterprises	\$2,914,523	49.55%	13.43%
Federal, civilian	\$44,499	0.76%	2.24%
Military	\$20,945	0.36%	0.31%
State and local	\$2,849,079	48.43%	10.89%

Source: Bureau of Economic Analysis CA5N Personal Income by Major Component and Earnings by NAICS Industry

Change in Earnings by Sector

Changes in earnings within Centre County industries between 2006 and 2015 (adjusted for inflation) are detailed in Table 10 and Figure 10. The percent change identified in Table 10 compares inflation adjusted 2006 dollars and 2015 dollars.

Eight industry sectors in the county had a positive increase in earnings that outpaced the state's. Mining, (which includes stone quarry operations that saw a significant increase in activity due to Marcellus Shale well pad

Penn State Extension

Development) not surprisingly grew by 183% compared to the state's 27%. Real estate and rental and leasing grew by 115%, which heavily outpaced the state's growth rate of 53%. Accommodations and food services grew by 94% over the ten-year period, outpacing this sector's 18% increase in Pennsylvania. Arts, entertainment, and recreation earnings increased by 52%, outpacing Pennsylvania's 41% increase in this sector. Earnings in the healthcare and social assistance sector in the county grew by 45%, while earning across the state in this sector grew by 19%. State and local government sector earnings grew by 21% compared to a 3% increase in this sector's earnings in Pennsylvania. Retail trade grew by 6% in the county compared to a 10% decrease in the state. Important sectors where Centre County's earnings trailed the state average by significant margins included information; farm earnings; professional, scientific, and technical services; management of companies and enterprises; educational services; and wholesale trade.

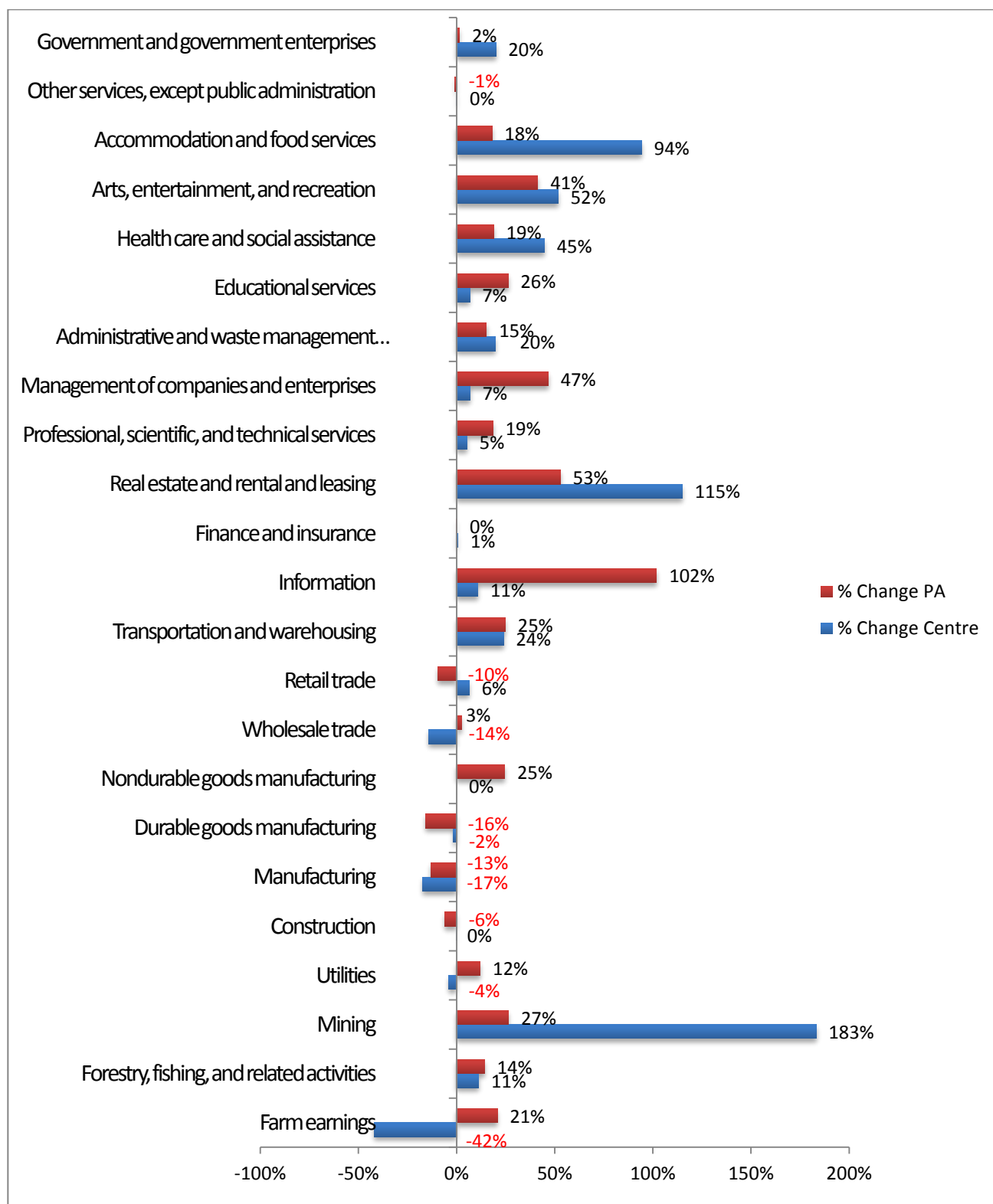
Table 10. Earnings by Industry, Centre County (\$1,000), 2006-2015

	2006 Nominal	2006 Real	2015 Real	% Change Centre *	% Change PA *
Farm earnings	\$12,465	\$14,655	\$8,528	-42%	21%
Nonfarm earnings	\$4,187,969	\$4,923,711	\$5,873,995	19%	10%
Private nonfarm earnings	\$2,122,649	\$2,495,556	\$2,959,472	19%	11%
Forestry, fishing, and related activities	\$8,374	\$9,845	\$10,958	11%	14%
Mining	\$41,601	\$48,909	\$138,512	183%	27%
Utilities	\$11,201	\$13,169	\$12,656	-4%	12%
Construction	\$217,626	\$255,859	\$256,259	0%	-6%
Manufacturing	\$287,387	\$337,875	\$279,280	-17%	-13%
Durable goods manufacturing	\$201,795	\$237,246	\$233,001	-2%	-16%
Nondurable goods manufacturing	(D)	D	\$14,323	D	25%
Wholesale trade	\$58,791	\$69,119	\$59,239	-14%	3%
Retail trade	\$213,639	\$251,171	\$267,413	6%	-10%
Transportation and warehousing	\$61,324	\$72,097	\$89,333	24%	25%
Information	\$92,482	\$108,729	\$120,638	11%	102%
Finance and insurance	\$96,066	\$112,943	\$113,835	1%	0%
Real estate and rental and leasing	\$46,023	\$54,108	\$116,218	115%	53%
Professional, scientific, and technical services	\$274,033	\$322,175	\$339,637	5%	19%
Management of companies and enterprises	\$59,666	\$70,148	\$74,961	7%	47%
Administrative and waste management services	\$56,910	\$66,908	\$80,061	20%	15%
Educational services	\$21,424	\$25,188	\$26,895	7%	26%
Health care and social assistance	\$336,117	\$395,166	\$572,125	45%	19%
Arts, entertainment, and recreation	\$16,294	\$19,157	\$29,076	52%	41%
Accommodation and food services	\$97,983	\$115,197	\$223,920	94%	18%
Other services, except public administration	\$125,708	\$147,792	\$148,456	0%	-1%
Government and government enterprises	\$2,065,320	\$2,428,155	\$2,914,523	20%	2%
Federal, civilian	\$34,709	\$40,807	\$44,499	9%	-1%
Military	\$19,918	\$23,417	\$20,945	-11%	-24%
State and local	\$2,010,693	\$2,363,932	\$2,849,079	21%	3%

Source: Bureau of Economic Analysis CA5N Personal Income by Major Component and Earnings by NAICS Industry, D = Not disclosed,

*% Change inflation adjusted - \$1,000 in 2006 = \$1,175.68 in 2015 dollars

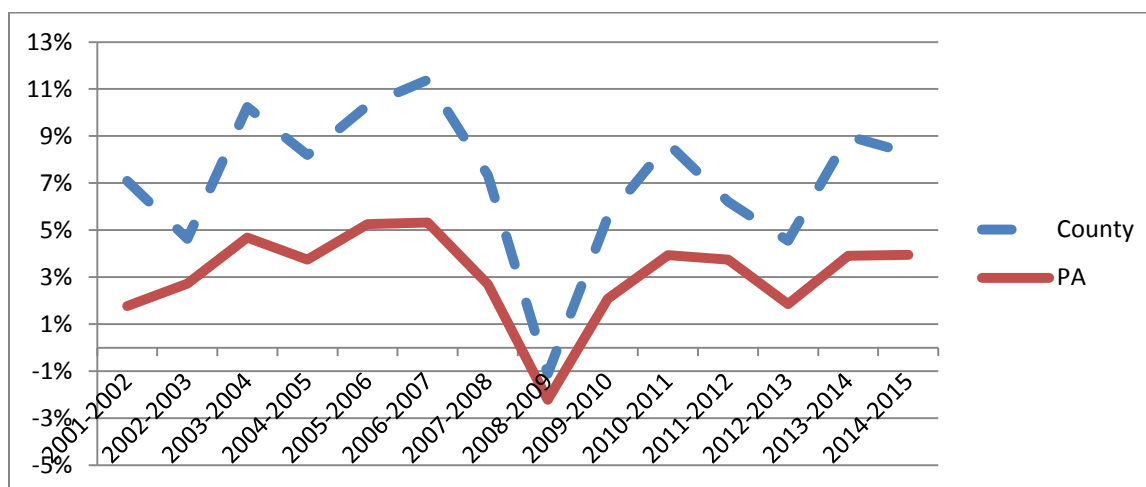
Figure 10. Percent Change in Earnings, 2006-2015, Centre County and Pennsylvania.



Source: Bureau of Economic Analysis CA5N Personal Income by Major Component and Earnings by NAICS Industry, *% Change inflation adjusted - \$1,000 in 2006 = \$1,175.68 in 2012

Figure 11 compares the yearly change in personal income from 2006 through 2015 for Centre County and Pennsylvania. The figure clearly shows that there is considerable difference in the growth or decline from year to year in personal income in the Centre County and Pennsylvania economies. Although the trends in county and state growth rates appear similar in shape, Centre County has consistently outpaced state growth rates during all the years in this timeframe.

Figure 11. Percent Change of Personal Income, 2006-2015, Centre County and Pennsylvania.



Source Bureau of Economic Analysis BEA CA25 Local Area Data

Employment and Earnings Compared: Centre County and Pennsylvania

Table 11 (below) provides a comparison of the share of employment and wages and salaries for Centre County and Pennsylvania in 2015. The percentages (share) of wages and salaries for five industry sectors (mining; manufacturing; information; professional, scientific, and technical services; health care and social assistance; and government and government enterprises) were all larger (in percentage terms) than employment in each of these sectors, which means that wages and salaries in these sectors are higher on average than in other sectors. In each of the remaining sectors the percentage share of employment was greater or equal to the share of earnings.

It is also worth noting the sectors with greatest growth and declines during this time period. In terms of substantial growth in employment, forestry; fishing and related activities; mining; real estate and rental and leasing; administrative and waste management services; health care and social assistance; and arts, entertainment and recreation; and farm employment were the most prominent (>14%). Notable declines include utilities; construction; wholesale trade; and management of companies and enterprises.

Table 11. Share and Percent Change in Employment, Earnings by Industry Sector,
Centre County and Pennsylvania

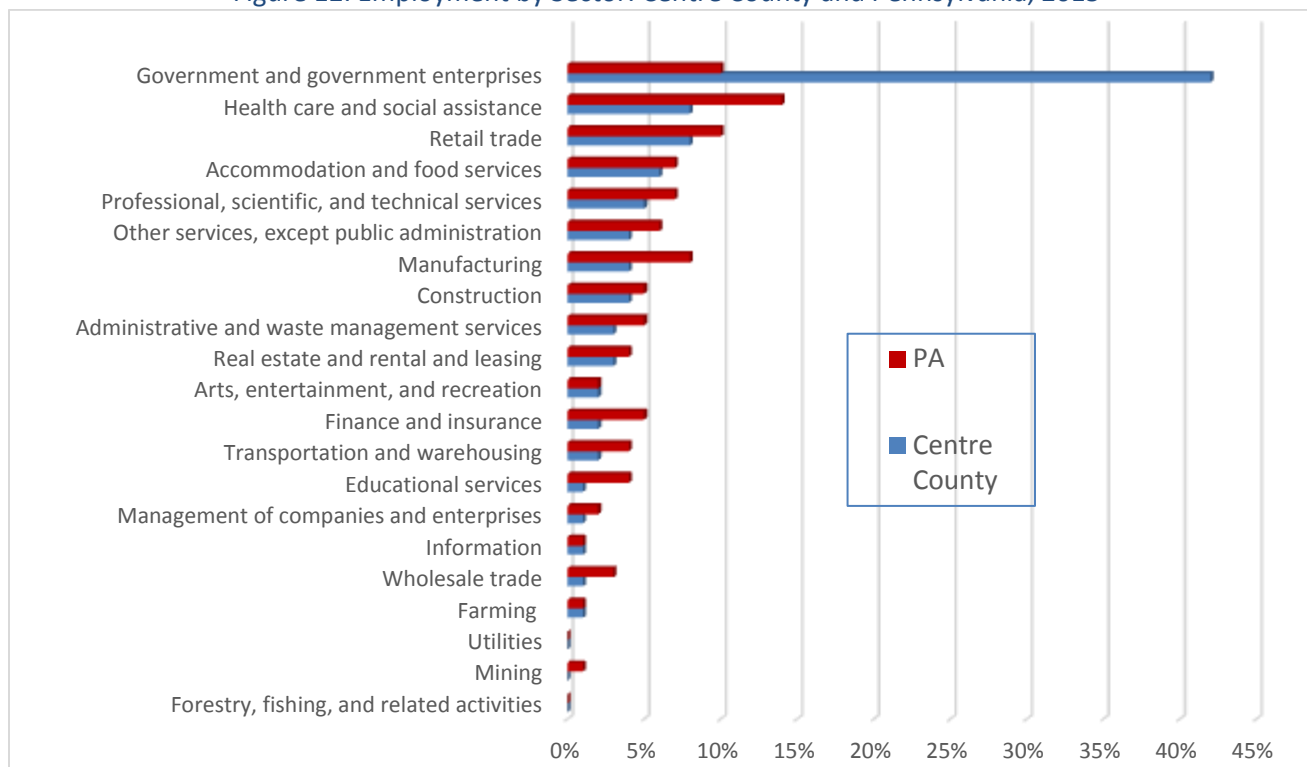
Sector	2015 Share of Employment (%)		Percent Change in Employment (2006-2015)		2015 Share of Wages and Salaries (%)	
	County	PA	County	PA	County	PA
Farm employment	1%	1%	14%	5%	0%	1%
Nonfarm employment	99%	99%	9%	5%	100%	99%
Private nonfarm employment	56%	89%	7%	6%	50%	86%
Forestry, fishing, and related activities	0%	0%	36%	17%	0%	0%
Mining	0%	1%	86%	91%	2%	1%
Utilities	0%	0%	-13%	19%	0%	1%
Construction	4%	5%	-11%	-8%	4%	6%
Manufacturing	4%	8%	-4%	-14%	5%	10%
Wholesale trade	1%	3%	-16%	-2%	1%	5%
Retail trade	8%	10%	-1%	-3%	5%	6%
Transportation and warehousing	2%	4%	10%	14%	2%	4%
Information	1%	1%	-1%	-17%	2%	4%
Finance and insurance	2%	5%	4%	12%	2%	7%
Real estate and rental and leasing	3%	4%	42%	25%	2%	2%
Professional, scientific, and technical services	5%	7%	1%	12%	6%	9%
Management of companies and enterprises	1%	2%	-15%	37%	1%	4%
Administrative and waste management services	3%	5%	19%	13%	1%	3%
Educational services	1%	4%	10%	16%	0%	3%
Health care and social assistance	8%	14%	30%	14%	10%	14%
Arts, entertainment, and recreation	2%	2%	16%	20%	0%	1%
Accommodation and food services	6%	7%	5%	11%	4%	3%
Other services, except public administration	4%	6%	6%	4%	3%	4%
Government and government enterprises	42%	10%	11%	-5%	50%	14%

Source: Bureau of Economic Analysis CA25N Total Full-time and Part-time Employment; CA5N Personal Income by Major Component and Earnings by NAICS Industry

Figures 12 and 13 compare both employment percentages and the share of earnings in Centre County and Pennsylvania for 2015 rank ordered by percent of employment. As highlighted in Figure 12, in all but government and government related services (including Penn State) which clearly dominates, Centre County had lower employment percentages than the state as a whole.

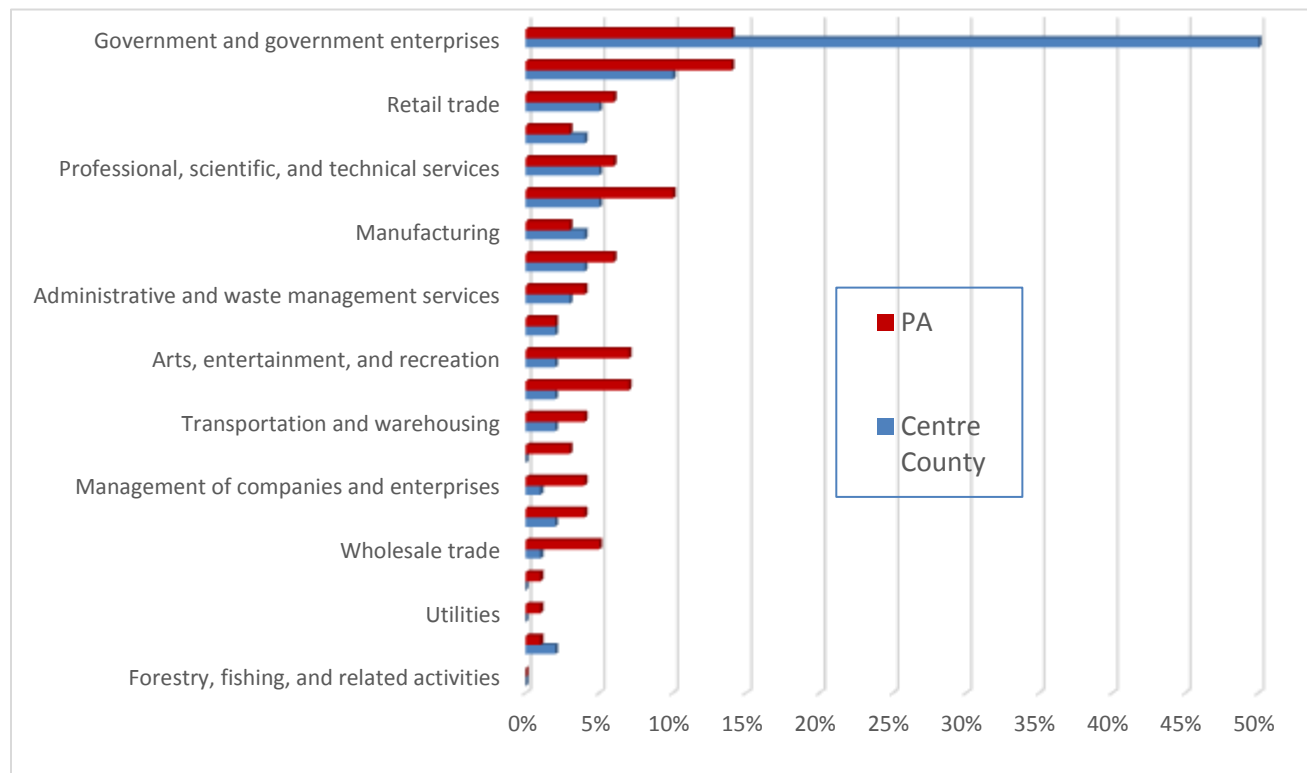
When we take this same rank ordered list relative to the share of earnings we see that, not surprisingly in most cases, the share of earnings mirrors the percentages of employment. There are three-exceptions: accommodations and food services; manufacturing; and mining each of which had less employment than the state average but a higher share of earnings.

Figure 12. Employment by Sector: Centre County and Pennsylvania, 2015



Source: Bureau of Economic Analysis CA25N Total Full-time and Part-time Employment

Figure 13. Share of Earnings: Centre County and Pennsylvania, 2015



Source: Bureau of Economic Analysis CA5N Personal Income by Major Component and Earnings by NAICS Industry

Economic Summary

Overall, Centre County's employment growth has outpaced the state's between 2006 and 2015 by 4 percentage points (9% vs 5% respectively), a growth rate 80% more than the state. In addition, over this same time period, Centre County's population growth (American Community Survey) exceeded its employment growth (13.9% vs. 9% respectively). In contrast, population change statewide was much slower, only 2%, while state employment grew by 5%, more than twice the change in population. The major lesson here is that population growth is much more robust in Centre County than statewide.

In terms of employment, (see Table 3) **Centre County is clearly dominated by several important industries: government and government related enterprises (42.3%); health care and social assistance (8.4%); retail trade (8.3%); accommodations and food services (5.9%); professional, scientific and technical services (5.4%); manufacturing (3.9%); and construction (3.8%).**

Related to employment growth, (Table 3) of the county's seven largest employment sectors (government and government related enterprises; health care and social assistance; accommodations and food services; retail trade; professional, scientific and technical services; manufacturing; and construction), Centre County did better than the state average in terms of government and related enterprises (11% vs -5%); health care and social services (30% vs. 14%); retail (-1% vs. -3%); and manufacturing (-4% vs. -14 %). In the remaining major industries, Centre County trailed the state's growth in employment growth: professional, scientific, and technical services (1% vs. 12%); accommodations and food services (5% vs. 11%) and construction (-11% vs.-8%). In each of these sectors it is worth further investigation regarding the underlying factors that may be driving both changes over time within the county, and why differences in percent employment may have occurred between the county and state.

From the perspective of earnings growth in these seven largest sectors (Table 10), **five industries (government and government related enterprises; health care and social assistance; accommodations and food services; retail trade; and construction) had growth rates that exceeded (or declined less) than the state**, while professional, scientific and technical services; and manufacturing both had growth rates lower than those for the state.

Five additional industry sectors in the county had earnings that outpaced those of the state. Mining grew by 183% compared to the state's 27%. Arts, entertainment, and recreation earnings increased by 52%, outpacing Pennsylvania's 41% increase in this sector. State and local government sector earnings grew by 21% compared to a 3% increase in this sector's earnings in Pennsylvania.

Five sectors in Centre County had earnings that trailed the state average (see Figure 10) including forestry, fishing and related activities farm earnings; utilities; manufacturing; wholesale trade; information; professional, scientific, and technical services; management of companies and enterprises; and educational services.

Related to employee commuting, 81% of people working in Centre County were residents of the county, while an additional 6% lived in Clearfield County. The vast majority of Centre County residents who are employed, 90%, work somewhere in Centre County, while 2% work in Clearfield County and 2% work in Clinton County.

Discussion Questions

Some of the questions you may want to consider as you think about the data detailed in this section include the following. You may think of a number of others as you begin to explore underlying causes and implications.

1. What are the characteristics or mix of farm proprietors within the county that may account for farm proprietors' income (-105% vs 38%) and overall farm earnings (-42% vs 21%) to trail the state's so substantially and while simultaneously seeing employment growth in farms grow by more than the state's? Should this be a concern? Why or why not?
2. Is there an opportunity to expand small business development and nonfarm proprietor's income in the county? What questions does this raise?
3. Centre County's population growth (American Community Survey) exceeded its employment growth (13.9% vs. 9% respectively). What does this imply for future planning, service needs, and economic opportunities?
4. What factors are influencing the relatively large declines (in percentage terms) in utilities, management of companies and enterprises and wholesale trade in Centre County relative to the state?
5. What factors are influencing the relatively strong growth (in percentage terms) in health care and social services income and employment in Centre County? What implications does this have for the future?
6. Does the high reliance on government and government related services (including Penn State) pose opportunities or challenges for Centre County? Are there things the county can do to either maximize or mitigate these?
7. What other factors and trends do you see in this data that are worth considering?
8. What additional demographic or workforce data would be useful to you as you begin to assess your long-term strategies?

CENTRE COUNTY AGRICULTURE AND RELATED INDUSTRIES

The Centre County agricultural economy has two separate components: 1) the production component that is reflected by the county's farms and the products generated by these businesses, including firms that provide inputs to farms, and those businesses who process farm products and; 2) the consumption component that exists to focus on delivering food to consumers. The production component of Centre County's economy exists because there are farms located in the county, while the consumption component exists because residents need to eat. Understanding the difference between these two components is important because, while they interrelate, the consumption component in the county will continue regardless of what happens to farms in the county. The consumption component also constitutes a steady market over time because people must eat.

The following data provides information that highlights Centre County's production agricultural economy and the businesses that use products produced by farms, as well as those that provide inputs and services to farms.

Centre County's Production Agricultural Economy

The United States Department of Agriculture conducts a nationwide census of agriculture every five years. This survey collects detailed information about production agriculture. Complete Census of Agriculture results are available at <http://www.agcensus.usda.gov/index.php>

In 2012, Centre County's 1,192 farms produced products valued at \$91.5 million and had an annual payroll of \$9.253 million (Table 12).

Table 12. Production Agriculture Economy, Centre County, 2007 and 2012

	2007	2012
Number of farms	1,146	1,192
Total Sales	\$69,661,000	\$91,581,000
Farm Labor Payroll	\$5,047,000	\$9,253,000
Workers employed > 150 days	357	388
Workers employed < 150 days	427	543
Seasonal Workers	10	13

Source: 2007 and 2012 Ag Census

As noted above, Centre County's total agricultural sales in 2012 were \$91,581,000. This represents a 19% increase from 2007 (in inflation adjusted dollars) and a 14% increase in the average sales per farm. As detailed in Table 13, crops (defined broadly) comprised 34% of this total while livestock sales made up 66% of all sales in 2012.

Table 13. Market Value of Products Sold, Centre County, 2007-2012, (Nominal and Real)

	2007 (nominal)	2007 (real)	2012 (real)	% Change	% Total
Total Sales (\$1,000)	\$69,661	\$77,137	\$91,581	19%	
Crop sales (\$1,000)	\$17,517	\$19,397	\$31,431	62%	34%
Livestock sales (\$1,000)	\$52,144	\$57,740	\$60,150	4%	66%
Average per farm	\$60,786	\$67,310	\$76,829	14%	

**Real dollars – inflation adjusted based on 2007 dollar values (\$1,000 in 2007 = \$875 in 2012 dollars)*

As outlined in Table 14, dairy products generated roughly 47% of Centre County's agricultural product sales in 2012. This is followed by oilseed and grain farming (23.9%); cattle and calves (12.3%); other crop farming (3.6%); sheep and goat farming (3.5%); and greenhouse, nursery, and floriculture (3.1%). Together these additional five categories account for 46.4% of all farm sales in the county.

Table 14. Sales by Product Type Centre County, 2012

	Value (\$1,000)	% Total Ag Product Sales	County Rank	State Rank
Oilseed and grain farming	\$21,851	23.9	2	19
Tobacco	\$269	0.3	10	9
Vegetable and melon farming	\$2,238	2.4	7	21
Fruit and tree nut farming	\$743	0.8	9	26
Greenhouse, nursery, and floriculture	\$2,852	3.1	6	27
Christmas trees	\$222	0.2	11	21
Other crop and hay farming	\$3,256	3.6	4	33
Poultry and eggs	\$232	0.3	10	37
Cattle and calves	\$11,297	12.3	3	20
Milk from cows	\$42,779	47.3	1	13
Hog and pig farming	\$1,178	0.3	10	23
Sheep and goat farming	\$240	3.5	5	23
Horses, ponies, mules, etc.	\$977	1.1	8	8
Aquaculture	\$3,447	0.3	10	2
Other animals and animal products	\$233	0.3	10	26
TOTAL	\$91,581	100.0		

Source: 2012 Ag Census

Land in Farms

In 2012, the county's 1,192 farms made up 162,041 acres. Overall farm numbers increased by 4% between 2007 and 2012, while land in farms increased by 5%. Taken together, the average size of all farms grew by 5%.

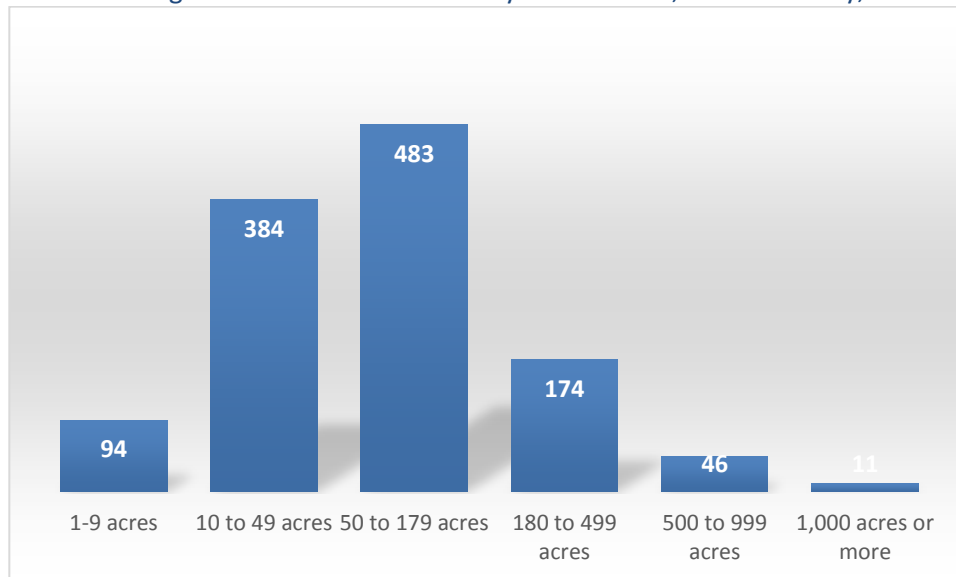
As detailed in Table 15 and Figure 14, 40% of the county's farms are less than 50 acres in size, while 41% are between 50 and 179 acres, and 20% are larger than 180 acres.

Table 15. Size of Farms by Number and Percentage

	Number of Farms 2007	Percent of Farms 2007	Number of Farms 2012	Percent of Farms 2012
1-9 acres	89	8%	94	8%
10 to 49 acres	372	32%	384	32%
50 to 179 acres	464	40%	483	41%
180 to 499 acres	172	15%	174	15%
500 to 999 acres	38	3%	46	4%
1,000 acres or more	11	1%	11	1%
Total Farms	1146		1192	

Source: 2007 and 2012 Ag Census

Figure 14. Number of Farms by Size in Acres, Centre County, 2012



Farm Size and Sales

About 87% of the total market value of farm products sold were generated by 243 farms that had sales of \$100,000 or more (20% of all farms). Fifty-two percent (629) of all farms in the county had annual sales of less than \$10,000.

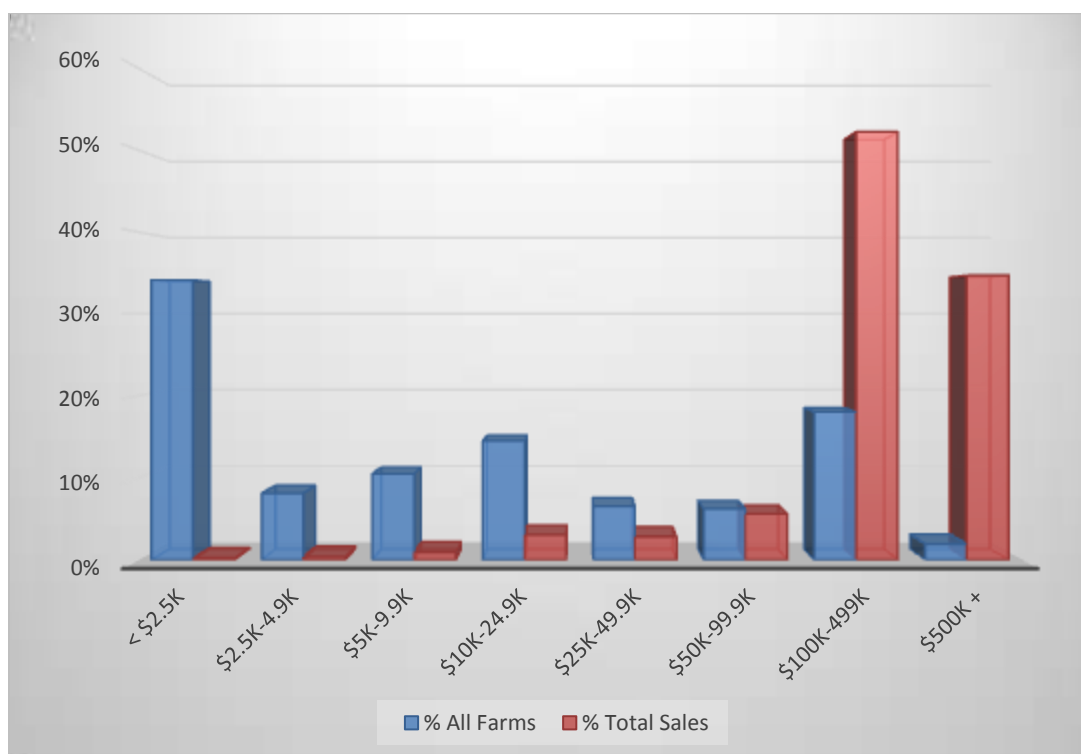
Table 16. Market Value of Farm Products Sold & Number of Farms, by Farm Size, Centre County, 2012

Annual Market Value of Farm Products Sold	Sales (1,000)	% Total Sales	# Farms	% All Farms
< \$2.5K	\$189	0.2%	407	34%
\$2.5K-4.9K	\$346	0.4%	97	8%
\$5K-9.9K	\$864	0.9%	125	10%
\$10K-24.9K	\$2,811	3.1%	173	15%
\$25K-49.9K	\$2,607	2.8%	78	7%
\$50K-99.9K	\$5,158	5.6%	74	6%
\$100K-499K	\$47,825	52.2%	215	18%
\$500K +	\$31,779	34.7%	23	2%
Total Farm Sales	\$91,581	100.0%	1192	100%

Source: 2012 Ag Census

Figure 15 below compares the percent of farms by size and percent of overall annual sales by farm size, Centre County, 2012.

Figure 15. Farm Size by Annual Sales, Centre County, 2012



Source: 2012 Ag Census

Assessed Value of Farms

The assessed value of land in farms \$178,827,385 in 2006 compared to \$225,797,600 in 2015 representing a 26% increase (State Tax Equalization Board Land Use Report, Centre County). As outlined in Table 17, the assessed value of farms was 7% compared to 26% for commercial properties, and 63% for residential properties in 2015. Centre County farmers have 85,278 acres of land enrolled in the Clean and Green program according to the 2015 Farmland Preservation Annual Report.

Table 17 Assessed Values of Properties 2006-2015

Land Type	2006		2015	
	Assessed Value	% of Total	Assessed Value	% of Total
Residential	\$1,813,598,500	61%	\$2,132,656,370	63%
Commercial	\$798,218,844	27%	\$891,145,509	26%
Agriculture	\$178,827,385	6%	\$225,797,600	7%

Source: State Tax Equalization Board Land Use Report, Centre County

Consumption-Based Agricultural Economy

The consumption-based agricultural economy is comprised of businesses that market food products to consumers; it exists because residents and visitors to Centre County need to eat. Overall, the consumption-based agricultural economy is comprised of roughly 81% of Centre County's total agriculture-related employment (see Table 18). Indeed, food and beverage stores by themselves account for 18% of agriculture-

related employment in Centre County, roughly equal to total employment in all of the production agriculture employment in the county (see Table 18). Food service and drinking places constitute the largest percentage (63%) of employment among all agriculture-related industries. Figure 16 provides a graphical depiction of this same data for Centre County.

Table 18 Agricultural Production and Consumption-Based Employment Centre, Annual Averages 2016

	Centre County	% of All Ag Employment in Centre Co.
Production Agricultural Economy		
Farm Employment*	1262	14%
Forestry and Logging	29	0.3%
Agriculture and forestry support	67	0.7%
Farm supplies merchant wholesalers	26	0.3%
Nursery, garden & farm supply stores	30	0.3%
Food manufacturers	195	2%
Wood product manufacturers	66	0.7%
<i>Total Production-Related Employment</i>	1675	19%
Consumption-based Agriculture Economy		
Food service & drinking places	5,657	63%
Food & beverage stores	1,621	18%
Grocery & food wholesalers	37	0.4%
<i>Total Consumption-Related Employment</i>	7,315	81%
Total Agriculture-Related Employment	8,990	100%

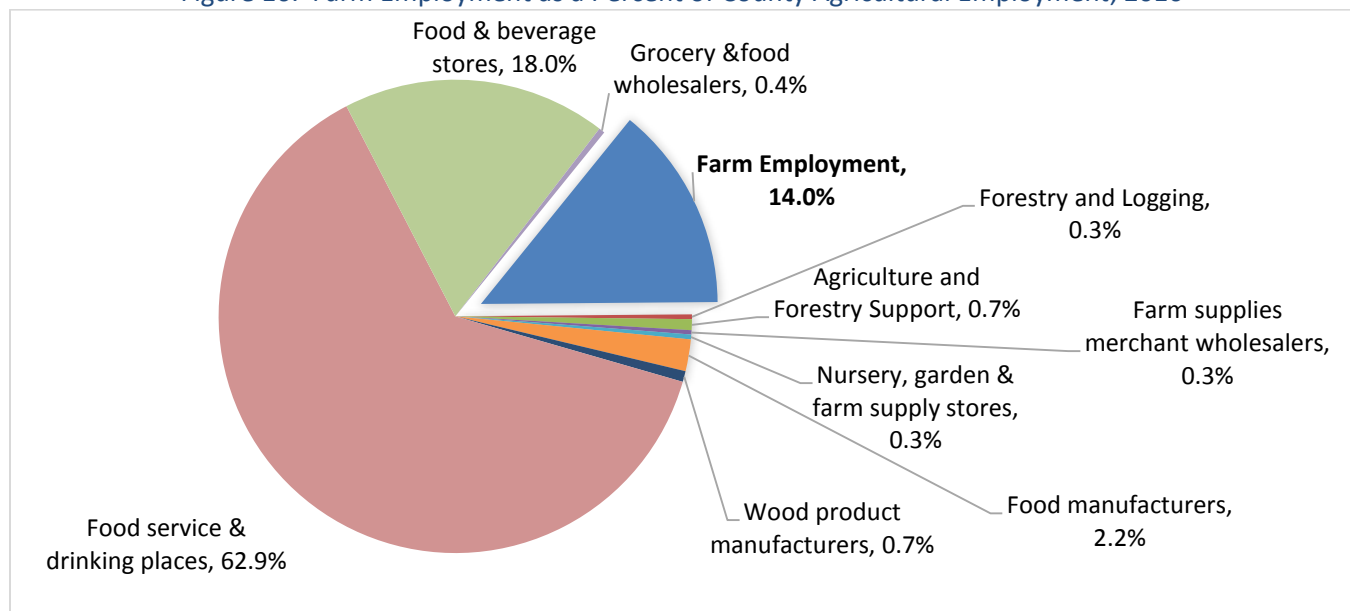
Sources - Bureau of Labor Statistics QCEW (www.bls.gov) Farm Employment data from Bureau of Economic Analysis CA25.

Note: D indicates that data is non-disclosed.

The *consumption* and *production* agricultural economies in Centre County overlap, but not completely, and do not necessarily depend upon each other. There is little doubt that only a relatively small proportion of the food consumed in Centre County comes from farms in the county. Even if all the county's farms went out of business, consumers would still be able to purchase food grown on farms in other counties, states and countries, just as they currently do. Centre County farms similarly rely upon county consumers for only a portion of their sales.

The relationship between the consumption and production agricultural economies creates economic development opportunities. The county has a large market of residents who must continually buy food products from somewhere. If they're not buying from local farms and food manufacturers, their food dollars simply leave the county and thus are unavailable to be spent on other goods and services.

Figure 16. Farm Employment as a Percent of County Agricultural Employment, 2016



Sources - Bureau of Labor Statistics QCEW (www.bls.gov) Farm Employment data from Bureau of Economic Analysis CA25. Note: D indicates that data is non-disclosed.

Agricultural Summary

Centre County's total agricultural sales in 2012 were \$91,581,000. This represents a 19% increase from 2007 (in inflation adjusted dollars) and a 14% increase in the average sales per farm. Crops (defined broadly) comprised 34% of this total while livestock sales made up 66% of all sales in 2012.

Dairy products generated roughly 47% of Centre County's agricultural product sales in 2012, followed by oilseed and grain farming (23.9%), cattle and calves (12.3%), and other crop farming (3.6%). Together these three categories account for approximately 40% of all farm sales in the county.

Overall the county ranks in 13th in milk from cows in the state. While the county ranks 2nd in aquaculture production, 8th in horse and ponies, 9th in tobacco these remaining categories all make up a small percentage of the overall agricultural sales in the county.

In 2012, the county's 1,192 farms made up 162,041 acres. Overall farm numbers increased by 4% between 2007 and 2012, while land in farms increased by 5%. Taken together, the average size of all farms grew by 5%.

Farm sales are dominated by those farms with \$100,000 or more in annual sales. Approximately eighty-seven percent of these sales were generated by 243 farms that had sales of \$100,000 or more – roughly 20% of all farms. Conversely, fifty-two percent of all farms in the county had annual sales of less than \$10,000.

Discussion Questions -- Agriculture

Some of the important questions you may want to consider as you think about the data detailed in this section include the following. You may think of a number of others as you begin to explore underlying causes and implications.

1. Is the fact that most agricultural sales come from the largest farms worth looking into further? Does any of this suggest opportunities for growth that may not be currently recognized? Why or why not?
2. Are there niches in the county's agriculture sector that can be capitalized on? What additional information would you need to make these determinations?
3. How much integration is there currently between the county's agricultural production and its agriculture-related industries? Is this worth exploring in greater detail?
4. Is there an opportunity to explore stronger linkages between the county's farm products, consumers, local institutions businesses, and food manufacturers?

SHIFT-SHARE ANALYSIS

Shift-share analysis examines change in local employment growth or decline compared to national and industry-specific changes, identifying local advantages and disadvantages, as well as pinpointing growth or potential growth industries. Like many other economic tools, the shift-share technique is a descriptive tool that should be used in combination with other analyses to help better understand the county's key industries. The analysis compares the employment change that occurred within a county to the overall employment changes occurring nationally, and to the national employment changes occurring within each individual sector of the economy. It helps to identify how much of local employment changes occur due to (1) trends within the overall national economy; and (2) trends specific to important sectors within the county's economy. Changes which cannot be explained by these national and sector trends are considered as having occurred because of some local comparative advantage or disadvantage.

As an example, the overall national economy grew by 9.92 percent between 2009 and 2015, and the manufacturing sector nationally fell by 1.75% relative to the overall economy. If the manufacturing sector in Centre County simply followed these national trends, it would be expected to have increased by 8.17 percent (9.92% national trend in the overall economy, minus the 1.75% decrease nationally within the manufacturing sector). Yet employment in the manufacturing sector in Centre County actually grew by only 7.06 percent during this same time period. So the manufacturing sector underperformed what would be expected by 1.11 percent (see table below). This underperformance must be due to some local comparative disadvantage, such as if the type of manufacturing done in the county is not as highly demanded, the manufacturing technology in the county lags industry standards, or some other factor.

Actual Growth in the Manufacturing Sector in Centre County		National Growth		Industry Mix (i.e. change in manufacturing nationally)		Regional Shift
		<i>Change which can be explained by overall national economic trends</i>		<i>Change which can be explained by national trends within the manufacturing sector</i>		<i>Change due to local conditions</i>
7.06%	=	9.92%	+	-1.75%	+	-1.11%

*Percent growth figures may not add due to rounding by a factor of $\pm 0.01\%$.

Table 19 contains the shift-share results for all sectors in Centre County. Differences between the extent and composition of local employment growth with comparison to the nation are broken down into the national growth, industry mix, and regional shift components, each considering separate influences on employment changes locally vs. nationally from 2009 to 2015.

Table 19: Shift-Share Components, Centre County 2009-2015

Major Industry	Actual Employment Growth		National Growth ⁴		Industry Mix ⁵		Region Shift ⁶	
	Percent	Net	Percent	Net	Percent	Net	Percent	Net
Farm Employment	8.54	113	9.92	131	-9.69	-128	8.31	110
Forestry, Fishing, and Related Activities	20.65	57	9.92	27	2.54	7	8.19	23
Mining	-16.90	-73	9.92	43	8.74	38	-35.56	-154
Utilities	-9.92	-12	9.92	12	-8.84	-11	-11.00	-13
Construction	-4.65	-216	9.92	461	3.22	150	-17.79	-826
Manufacturing	7.06	299	9.92	420	-1.75	-74	-1.11	-47
Wholesale Trade	-12.81	-161	9.92	125	2.73	34	-25.45	-320
Retail Trade	5.51	499	9.92	898	-1.06	-96	-3.34	-303
Transportation and Warehousing	5.69	103	9.92	180	10.74	195	-14.97	-271
Information	-2.11	-31	9.92	145	-5.14	-75	-6.89	-101
Finance and Insurance	-6.46	-186	9.92	286	-5.10	-147	-11.27	-325
Real Estate & Rental & Leasing	25.13	810	9.92	320	3.47	112	11.75	379
Professional, Scientific, and Technical Services	-0.48	-30	9.92	623	2.73	172	-13.13	-825
Management of Companies and Enterprises	8.54	63	9.92	73	10.50	78	-11.89	-88
Administrative and Waste Services	21.11	524	9.92	246	5.66	141	5.53	137
Educational Services	10.13	158	9.92	155	4.07	64	-3.86	-60
Health Care and Social Assistance	17.78	1,467	9.92	818	1.71	141	6.15	507
Arts, Entertainment, and Recreation	6.91	125	9.92	179	3.30	60	-6.30	-114
Accommodation and Food Services	2.21	148	9.92	663	7.15	478	-14.85	-993
Other Services (except Public Administration)	4.96	210	9.92	420	2.92	124	-7.88	-334
Federal Civilian	-16.09	-88	9.92	54	-17.30	-95	-8.71	-48
Military	0.22	1	9.92	45	-16.82	-76	7.13	32
Other/Suppressed Industries*	5.99	2,711	9.92	4,485	-10.74	-4,858	6.82	3,084
Total Employment	5.96	6,491	9.92	10,809	-3.46	-3,769	-0.50	-549

Source: Calculations by the Pennsylvania Regional Economic Analysis Project (PA-REAP) with data provided by the U.S. Department of Commerce, Bureau of Economic Analysis May 2014SHIFTSHAREB. *The "Other/Suppressed Industries" category portrayed in

this table represents a combined total of those industries for which data were unavailable due to confidentiality restrictions. Note: Percent growth figures may not add due to rounding by a factor of $\pm 0.01\%$.

As indicated in Table 19 (and shown in bold typeface), a number of Centre County industries experienced growth larger than the national employment growth rate of 9.92 percent, including forestry and fishing; real estate, rental and leasing; administrative and waste services, educational services; and health care and social assistance.

Other county industries as a group under-performed national employment changes. These include mining; utilities; construction; manufacturing, wholesale trade; retail trade; transportation and warehousing; information; finance and insurance; professional, scientific and technical services; management of companies and enterprises; arts, entertainment and recreation, accommodations and food services; other services; federal civilian; and military.

When national and industry specific influences are considered, a number of local industries stand out as doing better than expected –indicative of some local comparative advantage. These industries (bolded in the Regional Shift column) include farm employment; forestry and fishing; real estate, rentals and leasing; administrative and waste services; health care and social assistance; military; and other suppressed industries. For example, employment in real estate, rental and leasing increased by 379 more jobs than would be expected by national and industry trends, suggesting that this sector is more competitive relative to the real estate sector in other counties.

In each of these cases the critical question to ask is: *‘What is occurring in Centre County that would account for either more or less growth than would have been expected?’*

Shift-Share Summary

Centre County’s employment growth over 2009-2015 of **5.96%** trailed the **9.92%** growth of employment nationally by **-3.96%**. Accounting for this difference was an industry mix inclined toward industries that experienced slower growth, coupled with the fact that a large share of local industries underperformed their counterparts nationally.

Actual Growth -	=	National Growth	+	Industry Mix	+	Regional Shift
5.96 (6,491)	=	9.92 (10,809)	+	-3.46% (-3,769)	+	-0.50% (-549)

*Percent growth figures may not add due to rounding by a factor of $\pm 0.01\%$.

As indicated in Table 18, while the majority of Centre County’s industries underperformed what would have been expected nationally based on the make-up of the county’s industries, a number of others outperformed expectations (bolded), and others clearly are shown to have a local comparative advantage. Additional information to help you better understand Shift Share Analysis can be found in the Appendix.

Discussion Questions:

1. Centre County’s employment growth lagged behind overall employment growth nationally. While some of this can be attributed to the fact that the county’s industry mix includes industries that, on the whole,

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grew more nationally, what might be some of the factors that contribute to the fact that several Centre County industries have on average *under-performed* their counterparts nationally?

2. Conversely, a number of industries *outperformed* national trends (forestry and fishing; real estate and rental and leasing; administrative waste services; educational services; and health care and social assistance) and those that experienced growth rates below the national average but above those for that particular sector (farms; manufacturing; information; arts, entertainment and recreation; other services; military, and other suppressed industries). Why might this have been the case?
3. Are there specific industry groups that stand out as either particularly strong or problematic (relative to the national and industry expectations)?
4. What do the Shift-Share results suggest in terms of the county's economic development strategy? Can the county place a priority on creating a different industry mix? Are there things that can be done locally to enhance those industries that are doing either particularly well or poorly?

LOCATION QUOTIENTS

Location quotients help identify exporting and importing industries. This is important in terms of understanding the extent to which community needs are being met (or not) by local businesses (importing). Often, the location quotient reinforces what you already know about your local economy; but just as often, it uncovers things you did not know or, at least, changes your perceptions. The real strength of the tool is that it is a simple, yet effective educational resource. Calculating a location quotient is a straightforward process, and, in practice, most often uses employment data that is widely available.

Simply put, the location quotient identifies how local industries stack up with national averages. In practice, location quotients are often used to identify importing and exporting industries. An exporting industry is one where the industry not only meets the local demand for its products, but also produces enough so it can sell outside of the region. An importing industry is one where local production levels are insufficient to meet local demand.

When interpreting the data, a location quotient greater than 1.0 indicates that the economy is generally self-sufficient, and may even be exporting the good or service of that particular industry. (As a rule of thumb, a location quotient greater than 1.25 almost certainly identifies exporting industries.) On the other hand, a location quotient less than 1.0 suggests that the region tends to import the good or service. (The applicable rule of thumb is that a location quotient less than 0.75 indicates an importing industry.)

The following Bureau of Labor Statistics (BLS) data highlights the Location Quotients at only the sector level for Centre, Berks, and Lancaster Counties.

Location Quotient – Centre, Berks, and Lancaster Counties, 2015

Calculated Using the Quarterly Census of Employment and Wages Data Bureau of Labor Statistics Location Quotient Calculator

As highlighted in Table 20 (below), agriculture, forestry, fishing and hunting; mining, quarrying, and oil and gas extraction; utilities; wholesale trade; management of companies and enterprises; administrative and waste

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services; educational services; transportation and warehousing; and finance and insurance have LQs of .76 or less, indicating that Centre County is likely importing these goods or services from outside the county.

Conversely, while a LQ of more than 1.0 suggests Centre County may be an exporting county as it relates to these goods and services, a LQ of 1.25 almost certainly suggests that it is exporting. Industries that might be considered 'exporting' industries include: construction; retail trade; professional and technical services; health care and social assistance; information; real estate and rental and leasing; accommodation and food services; other services, except public administration.

It is also useful to compare Centre County's LQs with those of Berks and Lancaster counties. In a number of cases there are considerable differences between these counties. The critical question is – *what is happening in*

either Centre County (or its neighboring counties) that makes this the case, and what does this suggest for the County's economic development opportunities and strategy?

Table 20. Location Quotients Calculated From Quarterly Census of Employment and Wages Data, Centre County, Berks County, Lancaster County Pennsylvania, 2015

INDUSTRY	Centre County	Berks County	Lancaster County
Base Industry: Total, all industries	1.00	1.00	1.00
Agriculture, forestry, fishing and hunting	0.76	3.74	2.51
Mining, quarrying, and oil and gas extraction	0.67	0.23	0.26
Utilities	0.47	1.46	0.41
Construction	1.35	1.01	1.49
Manufacturing	0.81	1.82	1.52
Wholesale trade	0.40	1.04	1.31
Retail trade	1.38	1.01	1.10
Professional and technical services	1.02	0.74	0.63
Management of companies and enterprises	0.64	1.25	0.73
Administrative and waste services	0.66	1.05	0.71
Educational services	0.34	0.36	0.50
Health care and social assistance	1.03	0.90	0.91
Transportation and warehousing	0.65	0.84	1.05
Information	1.40	0.44	0.84
Finance and insurance	0.57	0.55	0.60
Real estate and rental and leasing	2.02	0.92	0.75
Arts, entertainment, and recreation	0.85	0.75	1.05
Accommodation and food services	1.58	0.92	1.01
Other services, except public administration	1.12	0.86	0.91
Unclassified	NC	NC	NC

Source: **Calculated from Quarterly Census of Employment and Wages Data Bureau of Labor Statistics Location Quotient Calculator**

Footnote: (NC) Not Calculable, the data does not exist or it is zero Location Quotient: Ratio of analysis-industry employment in the analysis area to base-industry employment in the analysis area divided by the ratio of analysis-industry employment in the base area to base-industry employment in the base area.

Location Quotient Summary

From the perspective of the Location Quotient data: agriculture, forestry, fishing and hunting; mining, quarrying, and oil and gas extraction; utilities; wholesale trade; management of companies and enterprises; administrative and waste services; educational services; transportation and warehousing; and finance and insurance have LQs of .76 or less, indicating that Centre County is likely importing these goods or services from outside the county (or going outside county to purchase these goods and services)

Exporting industries – those likely exporting goods and services to neighboring counties, the state or nation include: construction; retail trade; professional and technical services; health care and social assistance; information; real estate and rental and leasing; accommodation and food services; other services, except public administration.

Discussion Questions

1. Why might those industries that are importing goods and services from outside the county be doing so? Does this matter? How much does it matter?
2. Why might those industries that are exporting goods and services outside the county be doing so? What factors may be contributing to this circumstance? Does this matter? How much does it matter?
3. What, if anything, could be done from an economic development strategy perspective to address the needs of either importing or exporting industries?

OVERALL SUMMARY RESULTS

The sections of this report provide analyses of Centre County's employment, wages and salaries, competitive advantages of industry sectors (Shift Share Analysis) and import/export status (Location Quotient) of industry sectors. Table 21 summarizes key information from employment data, competitive advantage, and import/export status by industry sector.

As indicated in Table 21, five industry sectors (government and government enterprises; health care and social assistance; accommodation and food services; retail trade and scientific, technical and professional services) generated 69% of jobs in Centre County. Of these five major industries, government and government enterprises (which include Penn State) is the only sector to have percentages above the state's. It should also be noted that several other smaller industries outpaced employment growth in the county including manufacturing; and real estate and rental and leasing

In terms of Shift Share results, when national and industry specific influences are considered, a number of local industries stand out as doing better than expected –indicative of some local comparative advantage. These industries include farm employment; forestry and fishing; real estate, rentals and leasing; administrative and waste services; health care and social assistance; military; and other suppressed industries. For example, employment in real estate, rental and leasing increased by 379 more jobs than would be expected by national and industry trends, suggesting that this sector is more competitive relative to the real estate sector in other counties.

From the perspective of the Location Quotient data, agriculture, forestry, fishing and hunting; mining, quarrying, and oil and gas extraction; utilities; wholesale trade; management of companies and enterprises; administrative and waste services; educational services; transportation and warehousing; and finance and insurance have LQs

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of .76 or less, indicating that Centre County is likely importing these goods or services from outside the county (or going outside county to purchase these goods and services)

Exporting industries – those likely exporting goods and services to neighboring counties, the state or nation include: construction; retail trade; professional and technical services; health care and social assistance; information; real estate and rental and leasing; accommodation and food services; other services, except public administration.

Table 21. Summary Matrix: Share of Employment, Percent Change in Employment, Shift-Share (Local Share) and Location Quotient for Industry Sectors, Centre County and Pennsylvania

Sector	2015 Share of Employment (%)		Percent Change in Employment (2006-2015)		Competitive Advantage (Shift-Share – Regional Shift, %)	Import/Export (Location Quotient)	
	County	PA	County	PA	County	County	PA
Government and government enterprises	42%	10%	11%	-5%	(NC)	(NC)	(NC)
Retail trade	8%	10%	-1%	-3%	-3.34	1.38	0.92
Construction	4%	5%	-11%	-8%	-11.79	1.35	0.96
Transportation and warehousing	2%	4%	10%	14%	-14.97	0.65	1.11
Other services, except public administration	4%	6%	6%	4%	-7.78	1.12	1.00
Health care and social assistance	8%	14%	30%	14%	6.51	1.03	1.33
Farm employment	1%	1%	9%	5%	8.31	(NC)	(NC)
Manufacturing	4%	8%	-4%	-14%	-1.11	0.81	1.04
Finance and insurance	2%	5%	4%	12%	-11.27	0.57	0.98
Accommodation and food services	6%	7%	5%	11%	2.21	1.58	0.77
Professional, scientific, and technical services	5%	7%	1%	12%	-13.31	1.02	0.96
Real estate and rental and leasing	3%	4%	42%	24%	11.75	2.02	0.80
Educational services	1%	4%	10%	16%	3.86	0.34	1.90
Arts, entertainment, and recreation	2%	2%	16%	20%	-6.30	0.85	1.00
Information	1%	1%	-1%	-17%	-6.89	1.40	0.57
Forestry, fishing, and related activities	0%	0%	36%	17%	20.65	(D)	0.48
Mining	0%	1%	86%	91%	-35.56	0.67	0.82
Utilities	0%	0%	-13%	19%	-11.0	0.47	1.13
Wholesale trade	1%	3%	-16%	-2%	-25.45	0.40	0.98
Management of companies and enterprises	1%	2%	-15%	37%	-11.89	0.64	1.57
Administrative and waste management services	3%	5%	19%	13%	5.53	0.66	0.79

NC=Not calculated D = Not disclosed

Industry sectors are listed from largest to smallest percent of total employment.

OVERALL QUESTIONS AND CONSIDERATIONS

1. What opportunities are there to increase employment in those sectors that have a competitive advantage in Centre County?

2. What might be done to improve Centre County's competitive advantage for those that do not have a competitive advantage?
3. What might be contributing to the county's lagging growth in wages and salaries?
4. What additional information would help you better understand Centre County's economy? Where might you find that information?

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APPENDIX A

Employment Projections: 2014-24 Summary

Source: Bureau of Labor Statistics

According to the [Bureau of Labor Statistics](#), healthcare occupations and industries are expected to have the fastest employment growth and to add the most jobs between 2014 and 2024. With the increase in the proportion of the population in older age groups, more people in the labor force will be entering prime retirement age. As a result, the labor force participation rate is projected to decrease and labor force growth to slow. This slowdown of labor force growth is expected, in turn, to lead to Gross Domestic Product (GDP) growth of 2.2 percent annually over the decade. This economic growth is projected to generate 9.8 million new jobs--a 6.5-percent increase between 2014 and 2024.

The projections are predicated on assumptions including a 5.2 percent unemployment rate in 2024 and labor productivity growth of 1.8 percent annually over the projected period. Highlights of the BLS projections for the labor force and macro-economy, industry employment, and occupational employment are included below.

Labor Force and the Macro-economy

The civilian labor force is projected to reach 163.8 million in 2024, growing at an annual rate of 0.5 percent.

The labor force continues to age. The median age of the labor force was 37.7 in 1994, 40.3 in 2004, 41.9 in 2014, and is projected to be 42.4 in 2024. At the same time, the overall labor force participation rate is projected to decrease from 62.9 percent in 2014 to 60.9 percent in 2024.

The labor force participation rate for youth (ages 16 to 24) is projected to decrease from 55.0 percent in 2014 to 49.7 percent in 2024. The youth age group is projected to make up 11.3 percent of the civilian labor force in 2024 as compared with 13.7 percent in 2014. In contrast, the labor force participation rate for the 65-and-older age group is projected to increase from 18.6 percent in 2014 to 21.7 percent in 2024. This older age group is projected to represent 8.2 percent of the civilian labor force in 2024 as compared with 5.4 percent in 2014.

Labor force diversity is projected to increase, with white non-Hispanics making up 59.6 percent of the civilian labor force in 2024, compared with 64.6 percent in 2014.

Real GDP (2009 chained dollars) is projected to grow at an annual rate of 2.2 percent, from \$16.1 trillion in 2014 to \$19.9 trillion in 2024.

Within GDP, medical services will continue to grow as a share of nominal personal consumption expenditures. This category is projected to account for 18.0 percent of consumption in 2024--higher than its 16.7-percent share in 2014 and 15.0-percent share in 2004.

Industry Employment

Service-providing sectors are projected to capture 94.6 percent of all the jobs added between 2014 and 2024. Of these 9.3 million new service sector jobs, 3.8 million will be added to the healthcare and social assistance major sector.

The healthcare and social assistance major sector is expected to become the largest employing major sector during the projections decade, overtaking the state and local government major sector and the professional and

Penn State Extension

business services major sector. Healthcare and social assistance is projected to increase its employment share from 12.0 percent in 2014 to 13.6 percent in 2024.

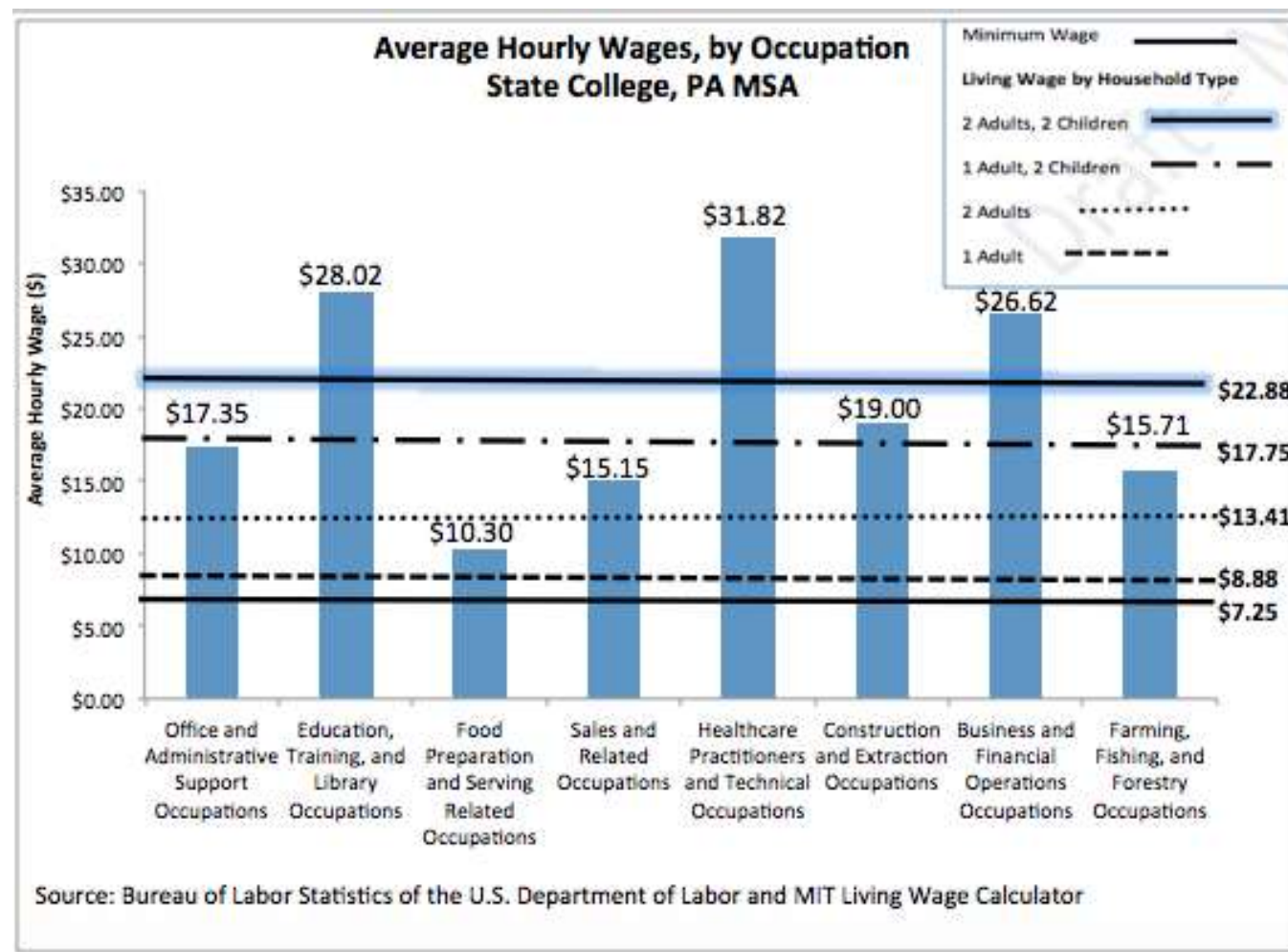
Construction is projected to add 790,400 jobs by 2024. Even with these additional jobs, employment in the construction major sector is not projected to return to the 2006 peak.

Manufacturing employment, between 2014 and 2024, is projected to decline at a 0.7 percent rate annually, a more moderate decline than the 1.6 percent rate experienced in the prior decade.

APPENDIX B

Living Wages – Supplemental Data

The focus on living wages is an important topic for consideration of the economic future of Centre County. Though beyond the scope of this report, it is important to understand how household demographics affect these discussions. The poverty rates for each household size are highlighted in the chart below detailing the wage levels needed to reach these limits for the State College MSA (which consists solely of Centre County). Not surprisingly, different occupations also have vastly different wage structures within the county.



The State College, PA Metropolitan Statistical Area (MSA) consists of Centre County. The principal city of the MSA is State College. According to the U.S. Census Bureau, the population estimate for this MSA as of July 2013 was 155,403. Total employment for all occupations in this MSA was 65,710 with a mean hourly wage of \$20.69, as of May 2013 (Bureau of Labor Statistics). The unemployment rate as of June 2014 was 4.8%.

It can be noted that the number of food preparation and serving related occupations is slightly skewed due to the amount of Penn State students working these occupations part time, rather than as a full time occupation.

APPENDIX C

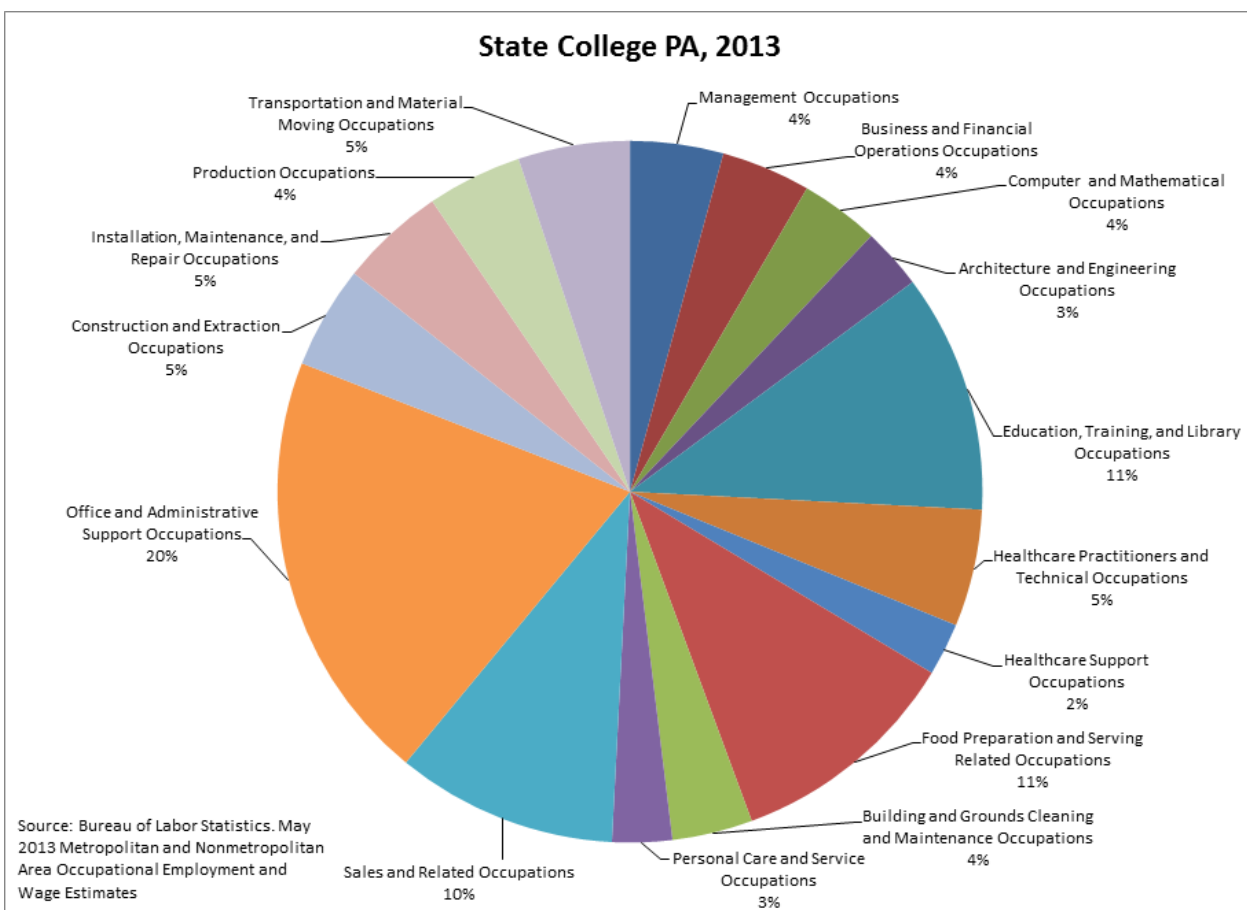
Occupational Employment

Healthcare support occupations and healthcare practitioners and technical occupations are projected to be the two fastest growing occupational groups during the 2014 to 2024 projections decade. These groups are projected to contribute the most new jobs, with a combined increase of 2.3 million in employment, representing about 1 in 4 new jobs.

Of the 819 detailed occupations, employment in 602 occupations is projected to grow, while employment in 217 occupations is projected to decline.

Two major groups are projected to have declining employment. Together, production occupations and farming, fishing, and forestry occupations are projected to shed 339,300 jobs during the projections decade.

For 11 of the 15 fastest growing occupations, some level of postsecondary education is typically required for entry.



Distribution of All Occupations within Centre County, 2016

Occupation	Employment		Hourly mean	Wages/Salaries		
	Total Employment	% of Employment		Annual mean	Annual 25% quartile	Annual 75% quartile
All Occupations	68,380	100%	\$21.96	\$45,670	\$23,630	\$56,850
Management Occupations	2,870	4%	\$52.70	\$109,620	\$66,390	\$129,950
Chief Executives	110	0%	*	*	*	*
General and Operations Managers	670	1%	\$55.55	\$115,530	\$63,050	\$143,530
Marketing Managers	100	0%	\$75.04	\$156,080	\$91,210	\$196,660
Sales Managers	60	0%	\$71.54	\$148,810	\$73,140	\$203,260
Computer and Information Systems Managers	210	0%	\$54.10	\$112,530	\$85,430	\$124,650
Financial Managers	170	0%	\$68.59	\$142,660	\$91,830	\$164,620
Industrial Production Managers	50	0%	\$51.30	\$106,700	\$86,130	\$127,250
Purchasing Managers	50	0%	*	*	*	*
Human Resources Managers	**		\$47.69	\$99,200	\$82,040	\$119,470
Construction Managers	110	0%	\$34.21	\$71,170	\$36,430	\$97,830
Education Administrators, Preschool and Childcare Center/Program	40	0%	\$24.11	\$50,150	\$37,920	\$51,480
Education Administrators, Elementary and Secondary School	60	0%	*	\$104,250	\$90,860	\$118,400
Architectural and Engineering Managers	80	0%	\$76.27	\$158,640	\$97,110	\$189,740
Food Service Managers	180	0%	\$29.02	\$60,370	\$42,430	\$75,980
Medical and Health Services Managers	120	0%	\$42.96	\$89,360	\$58,020	\$97,110
Property, Real Estate, and Community Association Managers	90	0%	\$27.71	\$57,630	\$42,110	\$62,680
Social and Community Service Managers	90	0%	\$30.32	\$63,070	\$45,680	\$84,200
Managers, All Other	50	0%	\$57.02	\$118,610	\$80,190	\$158,250
Business and Financial Operations Occupations	2,890	4%	\$30.72	\$63,890	\$44,830	\$76,420
Purchasing Agents, Except Wholesale, Retail, and Farm Products	150	0%	\$28.66	\$59,620	\$46,670	\$72,680
Claims Adjusters, Examiners, and Investigators	40	0%	\$32.10	\$66,770	\$50,800	\$83,820
Compliance Officers	130	0%	\$24.21	\$50,360	\$40,130	\$61,130
Cost Estimators	80	0%	\$28.51	\$59,290	\$49,260	\$69,180
Human Resources Specialists	170	0%	\$28.16	\$58,570	\$45,550	\$70,980
Management Analysts	70	0%	\$45.95	\$95,570	\$44,520	\$151,110
Meeting, Convention, and Event Planners	110	0%	\$24.87	\$51,730	\$39,050	\$66,760
Training and Development Specialists	130	0%	\$27.71	\$57,640	\$37,140	\$80,980

	Employment			Wages/Salaries		
	Total Employment	% of Employment	Hourly mean	Annual mean	Annual 25% quartile	Annual 75% quartile
Market Research Analysts and Marketing Specialists	370	1%	\$26.00	\$54,080	\$37,270	\$70,620
Business Operations Specialists, All Other	**		\$35.87	\$74,610	\$65,030	\$80,720
Accountants and Auditors	520	1%	\$32.88	\$68,390	\$44,780	\$86,210
Financial Analysts	40	0%	\$39.12	\$81,370	\$64,550	\$94,230
Personal Financial Advisors	150	0%	\$43.06	\$89,570	\$46,210	\$99,700
Loan Officers	**		\$33.99	\$70,710	\$45,750	\$92,180
Computer and Mathematical Occupations	2,580	4%	\$36.20	\$75,300	\$56,130	\$89,430
Computer Systems Analysts	160	0%	\$35.93	\$74,730	\$56,400	\$82,600
Computer Programmers	**		\$35.46	\$73,750	\$60,650	\$85,740
Software Developers, Applications	340	0%	\$49.22	\$102,370	\$75,450	\$114,670
Software Developers, Systems Software	80	0%	\$46.69	\$97,110	\$74,870	\$119,700
Web Developers	70	0%	\$32.95	\$68,530	\$45,970	\$87,150
Database Administrators	**		\$35.49	\$73,810	\$59,590	\$88,260
Network and Computer Systems Administrators	470	1%	\$33.66	\$70,010	\$57,380	\$80,050
Computer Network Architects	80	0%	\$39.03	\$81,180	\$68,520	\$88,860
Computer User Support Specialists	380	1%	\$25.83	\$53,730	\$45,280	\$60,690
Computer Network Support Specialists	80	0%	\$29.34	\$61,030	\$46,400	\$71,360
Computer Occupations, All Other	130	0%	\$40.05	\$83,300	\$61,150	\$106,170
Architecture and Engineering Occupations	1,620	2%	\$36.15	\$75,190	\$45,510	\$96,410
Surveyors	50	0%	\$23.46	\$48,800	\$41,630	\$61,210
Civil Engineers	190	0%	\$38.16	\$79,360	\$63,870	\$93,950
Electrical Engineers	40	0%	\$50.99	\$106,070	\$66,290	\$104,880
Electronics Engineers, Except Computer	50	0%	\$45.63	\$94,910	\$60,670	\$125,290
Environmental Engineers	30	0%	\$39.41	\$81,970	\$53,060	\$95,980
Industrial Engineers	90	0%	\$35.56	\$73,970	\$60,730	\$88,330
Mechanical Engineers	100	0%	\$40.94	\$85,160	\$60,330	\$109,600
Engineers, All Other	**		\$48.63	\$101,150	\$74,830	\$119,750
Architectural and Civil Drafters	90	0%	\$24.89	\$51,770	\$42,830	\$62,010
Electrical and Electronics Drafters	40	0%	\$25.57	\$53,190	\$42,830	\$52,970
Mechanical Drafters	40	0%	\$23.69	\$49,280	\$41,790	\$58,010
Civil Engineering Technicians	60	0%	\$22.09	\$45,950	\$32,610	\$61,120
Electrical and Electronics Engineering Technicians	90	0%	\$18.78	\$39,050	\$33,470	\$42,720
Environmental Engineering Technicians	70	0%	\$17.82	\$37,070	\$28,670	\$42,580
Engineering Technicians, Except Drafters, All Other	70	0%	\$17.86	\$37,140	\$29,710	\$43,310
Life, Physical, and Social Science Occupations	570	1%	\$31.45	\$65,420	\$43,280	\$81,810
Environmental Scientists and Specialists, Including Health	30	0%	\$41.97	\$87,310	\$68,620	\$102,390
Geoscientists, Except Hydrologists and Geographers	**		\$27.56	\$57,320	\$39,520	\$65,230

	Employment			Wages/Salaries		
	Total Employment	% of Employment	Hourly mean	Annual mean	Annual 25% quartile	Annual 75% quartile
Clinical, Counseling, and School Psychologists	60	0%	\$33.40	\$69,460	\$58,660	\$81,440
Urban and Regional Planners	**		\$24.99	\$51,980	\$28,630	\$65,430
Biological Technicians	40	0%	\$23.21	\$48,290	\$40,030	\$56,040
Community and Social Service Occupations	1,080	2%	\$22.10	\$45,970	\$32,330	\$58,000
Substance Abuse and Behavioral Disorder Counselors	50	0%	\$24.37	\$50,690	\$37,620	\$61,390
Educational, Guidance, School, and Vocational Counselors	**		\$26.67	\$55,470	\$39,480	\$69,510
Mental Health Counselors	210	0%	\$22.20	\$46,190	\$36,070	\$55,210
Rehabilitation Counselors	**		\$21.67	\$45,060	\$30,400	\$59,430
Child, Family, and School Social Workers	140	0%	\$17.30	\$35,990	\$28,500	\$39,630
Healthcare Social Workers	30	0%	\$26.63	\$55,390	\$45,830	\$63,220
Mental Health and Substance Abuse Social Workers	**		\$16.92	\$35,190	\$27,930	\$38,250
Social and Human Service Assistants	150	0%	\$15.47	\$32,180	\$24,420	\$36,870
Clergy	30	0%	\$21.79	\$45,320	\$30,790	\$51,750
Legal Occupations	270	0%	\$33.61	\$69,910	\$38,800	\$78,120
Lawyers	150	0%	\$41.56	\$86,440	\$53,190	\$94,750
Paralegals and Legal Assistants	60	0%	\$21.47	\$44,650	\$32,940	\$50,190
Education, Training, and Library Occupations	6,860	10%	\$29.24	\$60,810	\$36,080	\$80,730
Vocational Education Teachers, Postsecondary	60	0%	\$29.30	\$60,930	\$47,320	\$69,720
Preschool Teachers, Except Special Education	**		\$12.96	\$26,960	\$18,470	\$33,630
Kindergarten Teachers, Except Special Education	**		*	\$43,840	\$28,350	\$58,100
Elementary School Teachers, Except Special Education	390	1%	*	\$67,030	\$54,120	\$80,110
Middle School Teachers, Except Special and Career/Technical Education	160	0%	*	\$66,510	\$53,620	\$81,520
Secondary School Teachers, Except Special and Career/Technical Education	390	1%	*	\$60,070	\$44,810	\$77,430
Special Education Teachers, Kindergarten and Elementary School	**		*	\$69,010	\$58,550	\$80,260
Special Education Teachers, Secondary School	60	0%	*	\$67,050	\$53,670	\$81,960
Adult Basic and Secondary Education and Literacy Teachers and Instructors	40	0%	\$22.84	\$47,500	\$26,040	\$62,220
Self-Enrichment Education Teachers	420	1%	\$17.31	\$36,000	\$28,310	\$43,420
Teachers and Instructors, All Other, Except Substitute Teachers	**		*	\$39,370	\$22,410	\$49,120
Librarians	70	0%	\$27.15	\$56,480	\$47,140	\$63,790
Instructional Coordinators	**		\$29.42	\$61,180	\$48,570	\$72,980
Teacher Assistants	480	1%	*	\$25,540	\$22,700	\$29,040

	Employment			Wages/Salaries		
	Total Employment	% of Employment	Hourly mean	Annual mean	Annual 25% quartile	Annual 75% quartile
Arts, Design, Entertainment, Sports, and Media Occupations	720	1%	\$21.43	\$44,580	\$24,230	\$56,220
Graphic Designers	40	0%	\$22.40	\$46,600	\$33,290	\$59,410
Producers and Directors	40	0%	\$36.99	\$76,950	\$40,680	\$74,540
Coaches and Scouts	150	0%	*	\$38,610	\$19,350	\$51,360
Public Relations Specialists	140	0%	\$25.78	\$53,610	\$43,280	\$60,170
Editors	50	0%	\$17.08	\$35,520	\$23,960	\$45,250
Audio and Video Equipment Technicians	70	0%	\$16.74	\$34,820	\$21,960	\$45,530
Healthcare Practitioners and Technical Occupations	3,810	6%	\$32.63	\$67,870	\$39,460	\$72,580
Dentists, General	**		\$80.41	\$167,260	\$104,630	\$205,920
Dietitians and Nutritionists	**		\$16.34	\$33,990	\$26,850	\$33,410
Optometrists	30	0%	*	*	*	*
Pharmacists	170	0%	\$59.58	\$123,920	\$112,280	\$140,050
Physicians and Surgeons, All Other	90	0%	\$113.51	\$236,090	\$169,880	#
Physician Assistants	60	0%	\$44.32	\$92,190	\$84,330	\$109,760
Physical Therapists	110	0%	\$37.16	\$77,300	\$60,220	\$94,880
Speech-Language Pathologists	30	0%	\$32.42	\$67,440	\$57,910	\$76,770
Veterinarians	70	0%	\$47.75	\$99,330	\$74,850	\$104,660
Registered Nurses	**		\$27.73	\$57,670	\$53,040	\$63,000
Nurse Practitioners	80	0%	*	*	*	*
Dental Hygienists	110	0%	\$29.52	\$61,410	\$54,930	\$68,890
Radiologic Technologists	**		\$27.34	\$56,870	\$46,310	\$66,250
Pharmacy Technicians	110	0%	\$13.26	\$27,580	\$22,380	\$33,290
Veterinary Technologists and Technicians	90	0%	\$16.06	\$33,400	\$27,900	\$38,650
Licensed Practical and Licensed Vocational Nurses	410	1%	\$19.11	\$39,740	\$33,700	\$46,520
Medical Records and Health Information Technicians	40	0%	\$17.74	\$36,900	\$29,220	\$42,900
Health Technologists and Technicians, All Other	**		\$18.13	\$37,710	\$29,070	\$39,850
Athletic Trainers	50	0%	*	*	*	*
Healthcare Practitioners and Technical Workers, All Other	**		\$36.48	\$75,880	\$60,540	\$91,910
Healthcare Support Occupations	1,310	2%	\$13.79	\$28,670	\$22,930	\$32,310
Home Health Aides	370	1%	\$11.18	\$23,250	\$21,190	\$25,080
Nursing Assistants	400	1%	\$13.67	\$28,430	\$24,930	\$30,990
Physical Therapist Assistants	40	0%	\$22.01	\$45,780	\$35,910	\$56,290
Physical Therapist Aides	30	0%	\$8.46	\$17,590	\$16,720	\$18,920
Dental Assistants	120	0%	\$15.65	\$32,550	\$27,420	\$37,490
Medical Assistants	140	0%	\$15.36	\$31,960	\$27,060	\$36,360
Phlebotomists	40	0%	\$14.88	\$30,940	\$27,260	\$33,140

	Employment			Wages/Salaries		
	Total Employment	% of Employment	Hourly mean	Annual mean	Annual 25% quartile	Annual 75% quartile
Protective Service Occupations	1,470	2%	\$23.95	\$49,820	\$35,510	\$67,120
Detectives and Criminal Investigators	30	0%	\$35.26	\$73,340	\$63,400	\$80,240
Police and Sheriff's Patrol Officers	170	0%	\$34.56	\$71,890	\$62,070	\$85,320
Security Guards	210	0%	\$12.75	\$26,520	\$18,290	\$32,990
Food Preparation and Serving Related Occupations	6,900	10%	\$11.23	\$23,360	\$17,860	\$26,010
Chefs and Head Cooks	40	0%	\$19.31	\$40,170	\$26,860	\$49,850
First-Line Supervisors of Food Preparation and Serving Workers	460	1%	\$18.45	\$38,380	\$28,370	\$47,120
Cooks, Fast Food	100	0%	\$8.92	\$18,550	\$16,990	\$19,650
Cooks, Institution and Cafeteria	330	0%	\$12.07	\$25,100	\$20,770	\$28,100
Cooks, Restaurant	790	1%	\$11.57	\$24,060	\$19,350	\$28,280
Food Preparation Workers	250	0%	\$10.60	\$22,060	\$18,660	\$25,580
Bartenders	400	1%	\$12.47	\$25,940	\$18,060	\$30,570
Combined Food Preparation and Serving Workers, Including Fast Food	1,970	3%	\$9.67	\$20,110	\$17,100	\$21,400
Waiters and Waitresses	1,480	2%	\$11.50	\$23,920	\$18,440	\$26,750
Food Servers, Non-restaurant	40	0%	\$9.57	\$19,910	\$17,940	\$22,700
Dining Room and Cafeteria Attendants and Bartender Helpers	280	0%	\$10.88	\$22,630	\$18,300	\$27,020
Dishwashers	360	1%	\$9.08	\$18,880	\$17,100	\$20,180
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	320	0%	\$9.39	\$19,540	\$17,080	\$20,810
Building and Grounds Cleaning and Maintenance Occupations	2,230	3%	\$13.19	\$27,430	\$19,600	\$33,900
First-Line Supervisors of Housekeeping and Janitorial Workers	80	0%	\$20.46	\$42,550	\$32,700	\$49,680
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	70	0%	\$16.95	\$35,250	\$27,640	\$37,720
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	1,160	2%	\$13.42	\$27,920	\$20,770	\$34,940
Maids and Housekeeping Cleaners	440	1%	\$9.57	\$19,900	\$17,360	\$21,920
Landscaping and Groundskeeping Workers	450	1%	\$13.98	\$29,080	\$21,850	\$32,840
Personal Care and Service Occupations	2,150	3%	\$11.75	\$24,450	\$19,440	\$25,730
First-Line Supervisors of Personal Service Workers	120	0%	\$17.21	\$35,790	\$28,390	\$40,050
Nonfarm Animal Caretakers	50	0%	\$10.81	\$22,490	\$18,290	\$24,110
Ushers, Lobby Attendants, and Ticket Takers	70	0%	\$9.73	\$20,240	\$17,500	\$22,790
Amusement and Recreation Attendants	110	0%	\$8.68	\$18,060	\$16,740	\$19,060
Hairdressers, Hairstylists, and Cosmetologists	170	0%	\$14.88	\$30,950	\$19,340	\$38,090
Childcare Workers	210	0%	\$9.52	\$19,800	\$17,480	\$22,700
Personal Care Aides	1,000	1%	\$10.70	\$22,270	\$20,460	\$24,350
Fitness Trainers and Aerobics Instructors	200	0%	\$14.41	\$29,980	\$18,610	\$37,480

	Employment			Wages/Salaries		
	Total Employment	% of Employment	Hourly mean	Annual mean	Annual 25% quartile	Annual 75% quartile
Recreation Workers	100	0%	\$14.17	\$29,470	\$21,930	\$31,280
Residential Advisors	40	0%	\$13.13	\$27,310	\$17,880	\$37,210
Sales and Related Occupations	6,440	9%	\$16.87	\$35,100	\$18,450	\$39,520
First-Line Supervisors of Retail Sales Workers	540	1%	\$20.11	\$41,840	\$28,890	\$47,680
First-Line Supervisors of Non-Retail Sales Workers	50	0%	\$49.80	\$103,580	\$72,890	\$129,530
Cashiers	2,030	3%	\$9.40	\$19,540	\$17,140	\$20,940
Counter and Rental Clerks	250	0%	\$12.42	\$25,830	\$18,410	\$29,810
Parts Salespersons	120	0%	\$17.61	\$36,620	\$26,840	\$46,640
Retail Salespersons	2,100	3%	\$12.50	\$26,000	\$18,220	\$28,300
Advertising Sales Agents	40	0%	\$34.83	\$72,440	\$33,210	\$116,340
Insurance Sales Agents	120	0%	\$25.63	\$53,310	\$30,780	\$51,090
Securities, Commodities, and Financial Services Sales Agents	**		\$43.84	\$91,180	\$46,740	\$119,210
Sales Representatives, Services, All Other	470	1%	\$33.41	\$69,500	\$46,780	\$78,550
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	60	0%	*	*	*	*
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	360	1%	\$31.23	\$64,950	\$45,370	\$79,620
Real Estate Sales Agents	110	0%	\$21.36	\$44,430	\$32,970	\$44,820
Office and Administrative Support Occupations	12,200	18%	\$16.20	\$33,690	\$22,860	\$39,720
First-Line Supervisors of Office and Administrative Support Workers	500	1%	\$26.19	\$54,480	\$40,800	\$63,210
Billing and Posting Clerks	180	0%	\$17.57	\$36,540	\$29,440	\$44,080
Bookkeeping, Accounting, and Auditing Clerks	610	1%	\$17.42	\$36,240	\$29,940	\$40,000
Payroll and Timekeeping Clerks	40	0%	\$19.47	\$40,490	\$36,110	\$46,420
Procurement Clerks	40	0%	\$16.72	\$34,780	\$26,520	\$46,700
Tellers	190	0%	\$12.92	\$26,870	\$22,520	\$31,050
Customer Service Representatives	980	1%	\$13.48	\$28,030	\$19,300	\$35,890
Hotel, Motel, and Resort Desk Clerks	160	0%	\$10.30	\$21,430	\$18,190	\$24,750
Interviewers, Except Eligibility and Loan	210	0%	*	*	*	*
Human Resources Assistants, Except Payroll and Timekeeping	90	0%	\$18.02	\$37,490	\$31,330	\$43,250
Receptionists and Information Clerks	350	1%	\$11.74	\$24,410	\$19,220	\$28,860
Police, Fire, and Ambulance Dispatchers	**		\$16.47	\$34,260	\$27,780	\$41,060
Postal Service Clerks	40	0%	\$21.13	\$43,950	\$39,180	\$56,790
Postal Service Mail Carriers	140	0%	\$23.70	\$49,290	\$35,420	\$59,850
Production, Planning, and Expediting Clerks	100	0%	\$24.50	\$50,950	\$37,520	\$62,160
Shipping, Receiving, and Traffic Clerks	260	0%	\$16.39	\$34,090	\$27,420	\$39,230

	Employment		Hourly mean	Wages/Salaries		
	Total Employment	% of Employment		Annual mean	Annual 25% quartile	Annual 75% quartile
Stock Clerks and Order Fillers	980	1%	\$11.21	\$23,310	\$18,700	\$25,770
Executive Secretaries and Executive Administrative Assistants	570	1%	*	*	*	*
Legal Secretaries	80	0%	\$18.23	\$37,920	\$29,280	\$46,540
Medical Secretaries	250	0%	\$15.04	\$31,280	\$27,790	\$34,780
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	2,040	3%	\$16.49	\$34,300	\$26,820	\$39,480
Data Entry Keyers	30	0%	\$15.94	\$33,160	\$28,690	\$37,560
Office Clerks, General	2,510	4%	\$15.19	\$31,600	\$24,580	\$37,470
Farming, Fishing, and Forestry Occupations	180	0%	\$16.86	\$35,070	\$22,800	\$45,290
Farmworkers, Farm, Ranch, and Aquacultural Animals	50	0%	\$13.00	\$27,040	\$17,860	\$36,140
Construction and Extraction Occupations	2,880	4%	\$20.91	\$43,500	\$31,750	\$51,300
First-Line Supervisors of Construction Trades and Extraction Workers	410	1%	\$29.33	\$61,010	\$49,990	\$71,230
Carpenters	410	1%	\$21.18	\$44,060	\$33,710	\$50,310
Cement Masons and Concrete Finishers	70	0%	\$19.59	\$40,740	\$34,190	\$46,630
Construction Laborers	490	1%	\$14.34	\$29,820	\$23,920	\$35,700
Paving, Surfacing, and Tamping Equipment Operators	**		\$16.82	\$34,980	\$29,630	\$39,110
Operating Engineers and Other Construction Equipment Operators	360	1%	\$23.40	\$48,660	\$36,810	\$53,740
Electricians	170	0%	\$19.91	\$41,400	\$32,090	\$48,590
Glaziers	60	0%	\$17.04	\$35,440	\$29,550	\$41,380
Plumbers, Pipefitters, and Steamfitters	110	0%	\$22.80	\$47,420	\$36,170	\$52,970
Structural Iron and Steel Workers	50	0%	\$25.48	\$53,000	\$43,960	\$57,180
Construction and Building Inspectors	70	0%	\$28.51	\$59,300	\$45,570	\$66,750
Highway Maintenance Workers	130	0%	\$17.44	\$36,270	\$25,160	\$45,660
Construction and Related Workers, All Other	40	0%	*	*	*	*
Installation, Maintenance, and Repair Occupations	3,220	5%	\$19.30	\$40,140	\$29,790	\$47,550
First-Line Supervisors of Mechanics, Installers, and Repairers	180	0%	\$33.26	\$69,190	\$47,970	\$70,100
Computer, Automated Teller, and Office Machine Repairers	40	0%	\$14.63	\$30,420	\$24,430	\$36,030
Telecommunications Equipment Installers and Repairers, Except Line Installers	70	0%	\$27.03	\$56,220	\$38,580	\$73,130
Automotive Body and Related Repairers	40	0%	\$19.97	\$41,540	\$33,990	\$48,310
Automotive Service Technicians and Mechanics	280	0%	\$18.30	\$38,070	\$30,880	\$46,160
Bus and Truck Mechanics and Diesel Engine Specialists	150	0%	\$16.98	\$35,320	\$29,000	\$39,230
Mobile Heavy Equipment Mechanics, Except Engines	80	0%	\$22.45	\$46,700	\$37,170	\$50,760

	Employment		Hourly mean	Wages/Salaries		
	Total Employment	% of Employment		Annual mean	Annual 25% quartile	Annual 75% quartile
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	270	0%	\$18.10	\$37,650	\$30,950	\$44,860
Industrial Machinery Mechanics	130	0%	\$20.31	\$42,250	\$31,010	\$49,450
Maintenance and Repair Workers, General Installation, Maintenance, and Repair Workers, All Other	1,660	2%	\$17.69	\$36,800	\$28,550	\$44,670
	50	0%	\$23.89	\$49,690	\$31,390	\$65,980
Production Occupations	2,800	4%	\$16.98	\$35,320	\$26,050	\$40,850
First-Line Supervisors of Production and Operating Workers	170	0%	\$28.78	\$59,860	\$47,500	\$72,580
Electrical and Electronic Equipment Assemblers	400	1%	\$15.20	\$31,620	\$26,330	\$36,520
Electromechanical Equipment Assemblers	150	0%	\$18.32	\$38,110	\$30,030	\$46,020
Team Assemblers	150	0%	\$15.75	\$32,760	\$26,920	\$37,700
Bakers	60	0%	\$13.78	\$28,670	\$22,760	\$33,730
Butchers and Meat Cutters	40	0%	\$13.08	\$27,200	\$20,830	\$33,320
Computer-Controlled Machine Tool Operators, Metal and Plastic Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	90	0%	\$14.79	\$30,760	\$22,540	\$38,020
	**		\$16.11	\$33,510	\$27,460	\$39,940
Machinists	150	0%	\$19.43	\$40,410	\$35,320	\$46,350
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	30	0%	\$17.59	\$36,580	\$33,900	\$39,440
Welders, Cutters, Solderers, and Brazers	70	0%	\$18.85	\$39,210	\$31,950	\$44,180
Printing Press Operators	60	0%	\$17.79	\$36,990	\$33,720	\$40,410
Laundry and Dry-Cleaning Workers	130	0%	\$10.55	\$21,950	\$19,520	\$23,850
Cabinetmakers and Bench Carpenters	60	0%	*	*	*	*
Water and Wastewater Treatment Plant and System Operators	70	0%	\$18.58	\$38,650	\$32,800	\$46,720
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	40	0%	\$15.04	\$31,280	\$23,400	\$36,340
Inspectors, Testers, Sorters, Samplers, and Weighers	200	0%	\$17.82	\$37,060	\$26,910	\$44,820
Helpers--Production Workers	**		\$14.03	\$29,170	\$21,940	\$36,370
Production Workers, All Other	100	0%	\$17.01	\$35,380	\$26,350	\$40,580
Transportation and Material Moving Occupations	3,330	5%	\$15.82	\$32,900	\$22,000	\$40,040
First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	50	0%	\$21.93	\$45,620	\$33,900	\$55,790
First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	50	0%	\$28.39	\$59,060	\$46,260	\$69,140
Bus Drivers, School or Special Client	360	1%	\$15.06	\$31,330	\$24,590	\$38,300
Driver/Sales Workers	200	0%	\$12.27	\$25,520	\$17,820	\$33,810
Heavy and Tractor-Trailer Truck Drivers	580	1%	\$21.90	\$45,560	\$36,070	\$56,150

	Employment			Wages/Salaries		
	Total Employment	% of Employment	Hourly mean	Annual mean	Annual 25% quartile	Annual 75% quartile
Light Truck or Delivery Services Drivers	340	0%	\$18.56	\$38,610	\$21,050	\$57,560
Taxi Drivers and Chauffeurs	80	0%	\$13.24	\$27,540	\$20,160	\$34,310
Industrial Truck and Tractor Operators	80	0%	\$15.42	\$32,080	\$25,600	\$38,500
Cleaners of Vehicles and Equipment	170	0%	\$10.05	\$20,900	\$17,880	\$23,890
Laborers and Freight, Stock, and Material Movers, Hand	930	1%	\$11.50	\$23,920	\$20,820	\$25,110
Packers and Packagers, Hand	120	0%	\$13.60	\$28,280	\$23,100	\$32,820
Refuse and Recyclable Material Collectors	**		\$16.53	\$34,380	\$28,000	\$40,740

Source: BLS Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates, 2016

**Percentage of Workers in Major Occupations
by Metropolitan and Nonmetropolitan Statistical Area, 2013**

Occupation	Metropolitan Statistical Areas						
	Allentown- Bethlehem- Easton	Altoona	Erie	Harrisburg Carlisle	Johnstown	Lancaster	Lebanon
Total Employment	336,560	57,730	125,060	307,350	55,560	221,960	50,150
Architecture and	1.6%	1.0%	1.6%	1.8%	1.4%	1.7%	0.6%
Arts, Design, Entertainment, Sports, and Media	0.9%	0.6%	1.3%	1.2%	0.6%	1.4%	0.6%
Building and Grounds Cleaning and Maintenance	3.3%	3.4%	3.3%	2.7%	2.9%	2.9%	3.1%
Business and Financial Operations	3.7%	2.7%	3.5%	6.8%	3.7%	3.5%	2.9%
Community and Social Service	1.7%	2.0%	2.0%	1.7%	3.7%	1.3%	1.7%
Computer and Mathematical	2.0%	1.1%	1.0%	3.6%	1.2%	1.2%	0.7%
Construction and Extraction	3.2%	3.8%	2.9%	3.0%	3.7%	5.4%	3.1%
Education, Training, and Library	7.1%	5.3%	6.5%	5.4%	6.7%	5.2%	5.1%
Farming, Fishing, and Forestry	0.1%	-	0.0%	0.1%	-	0.3%	0.3%
Food Preparation and	8.6%	8.6%	9.6%	8.0%	9.6%	9.1%	8.5%
Healthcare Practitioners and Technical	6.9%	8.0%	6.7%	5.9%	8.5%	5.5%	6.2%
Healthcare Support	4.1%	5.3%	4.4%	2.7%	3.5%	3.6%	3.4%
Installation, Maintenance, and Repair	4.0%	4.1%	3.5%	3.7%	4.1%	4.0%	5.5%
Legal	0.4%	0.3%	0.3%	1.0%	0.4%	0.3%	0.2%
Life, Physical, and Social Science	0.6%	0.4%	0.2%	0.9%	0.7%	0.4%	1.0%
Management	3.8%	2.7%	3.2%	4.1%	3.6%	3.2%	2.9%
Office and Administrative Support	16.8%	15.5%	15.2%	18.8%	16.6%	15.0%	16.6%
Personal Care and Service	3.2%	3.4%	4.0%	3.3%	4.4%	2.9%	2.8%
Production	7.4%	8.6%	12.1%	4.3%	5.6%	10.7%	10.2%
Protective Service	1.8%	1.8%	2.3%	2.0%	2.4%	1.0%	1.3%
Sales and Related	10.5%	12.2%	11.4%	9.2%	10.6%	11.9%	9.4%
Transportation and Material Moving	8.2%	9.3%	4.9%	9.8%	6.2%	9.2%	13.9%

Source: Bureau of Labor Statistics of the U.S. Department of Labor May 2013. Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates

Percentage of Workers in Major Occupations by Metropolitan Area					
Occupation	Metropolitan Statistical Areas				
	New York-Northern New Jersey-Long Island	Philadelphia-Camden-Wilmington	Philadelphia	Pittsburgh	Reading
Total Employment	8,416,800	2,666,990	1,840,120	1,130,750	165,800
Architecture and Engineering	1.1%	1.6%	1.6%	1.9%	1.6%
Arts, Design, Entertainment, Sports, and Media	2.2%	1.2%	1.4%	1.1%	0.9%
Building and Grounds Cleaning and Maintenance	3.5%	3.1%	3.1%	2.8%	2.8%
Business and Financial Operations	6.1%	6.0%	6.3%	5.1%	3.8%
Community and Social Service	1.7%	2.1%	2.2%	1.9%	1.9%
Computer and Mathematical	3.0%	3.2%	3.4%	2.8%	1.5%
Construction and Extraction	3.1%	3.0%	2.9%	4.5%	3.5%
Education, Training, and Library	7.3%	6.8%	6.4%	5.8%	6.8%
Farming, Fishing, and Forestry	0.0%	0.1%	0.1%	0.0%	0.1%
Food Preparation and Serving Related	7.2%	7.9%	7.9%	9.1%	8.3%
Healthcare Practitioners and Technical	5.5%	6.4%	6.4%	6.7%	6.2%
Healthcare Support	3.8%	3.7%	3.9%	3.4%	3.5%
Installation, Maintenance, and Repair	3.3%	3.6%	3.5%	4.0%	4.7%
Legal	1.2%	1.1%	1.2%	0.8%	0.5%
Life, Physical, and Social Science	0.8%	1.3%	1.3%	1.0%	0.4%
Management	5.4%	4.4%	4.4%	3.8%	3.3%
Office and Administrative Support	17.8%	17.2%	17.0%	17.0%	15.3%
Personal Care and Service	3.8%	3.3%	3.6%	3.3%	2.7%
Production	3.5%	4.9%	4.9%	5.9%	12.7%
Protective Service	3.1%	2.4%	2.4%	2.1%	1.4%
Sales and Related	10.7%	10.7%	10.7%	10.7%	10.2%
Transportation and Material Moving	5.9%	6.1%	5.5%	6.1%	7.8%

Percentage of Workers in Major Occupations by Metropolitan Statistical Areas					
Occupation	Metropolitan Statistical Areas				
	Scranton-Wilkes Barre	State College	Williamsport	York-Hanover	Youngstown Warren-Boardman
Total Employment	250,300	65,710	53,550	173,250	218,770
Architecture and Engineering	1.0%	2.6%	1.7%	1.9%	1.0%
Arts, Design, Entertainment, Sports, and Media	0.9%	1.4%	0.6%	0.9%	0.7%
Building and Grounds Cleaning and Maintenance	3.2%	3.5%	2.9%	2.8%	2.9%
Business and Financial Operations	3.5%	3.8%	3.1%	3.7%	3.0%
Community and Social Service	2.3%	1.6%	1.9%	1.6%	1.8%
Computer and Mathematical	1.3%	3.4%	1.0%	1.3%	1.0%
Construction and Extraction	3.8%	4.4%	5.8%	4.3%	3.6%
Education, Training, and Library	5.8%	10.3%	5.6%	5.6%	5.7%
Farming, Fishing, and Forestry	0.1%	0.2%	0.1%	0.1%	0.1%
Food Preparation and Serving Related	8.4%	10.1%	8.7%	8.6%	10.6%
Healthcare Practitioners and Technical	6.6%	5.1%	5.9%	6.1%	6.8%
Healthcare Support	3.9%	2.3%	3.2%	2.7%	4.4%
Installation, Maintenance, and Repair	3.9%	4.5%	5.2%	4.5%	3.9%
Legal	0.6%	0.4%	0.7%	0.3%	0.4%
Life, Physical, and Social Science	0.5%	0.9%	0.7%	0.4%	0.4%
Management	3.2%	4.0%	3.4%	3.3%	3.8%
Office and Administrative Support	16.9%	18.7%	14.7%	14.9%	14.4%
Personal Care and Service	2.9%	2.6%	3.0%	2.5%	2.5%
Production	8.2%	4.1%	11.6%	12.3%	10.3%
Protective Service	2.1%	1.8%	2.0%	1.6%	2.5%
Sales and Related	11.1%	9.5%	10.8%	10.3%	13.1%
Transportation and Material Moving	9.7%	4.8%	7.5%	10.2%	7.3%

Source: Yarger, 2014; Bureau of Labor Statistics of the U.S. Department Of Labor May 2013. Metropolitan and Nonmetropolitan Area. Occupational Employment and Wage Estimates. *References* Yarger, Hillary J. 2014. "Pennsylvania: Poverty, Minimum Wage, and Living Wages." University Park, PA: Penn State University: Center For Economic and Community Development.